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## Original Articles.

### HYPERTROPHIC STENOSIS IN INFANTS.

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THE data which form the basis of this paper have been derived from a study of 141 cases. These patients have been treated in a variety of ways both medically and surgically. Microscopical examinations of the stomach have been made in twelve cases by Dr. Wollstein, pathologist to the hospital. Of the infants who recovered, three have been lost sight of; ten died subsequently from other conditions; the remaining sixty-four have been followed almost up to the date of writing, twelve of them for a period of four years or over.

The clinical course and the uniform pathological findings have convinced my colleagues as well as myself that a division of cases of pyloric stenosis of infants into spasmodic and hypertrophic types is not admissible.

In hypertrophic stenosis the pylorus forms a tumour which is about as large as a peanut or the last phalanx of the little finger. It is of a glistening white colour and has a cartilaginous hardness. The opening into the duodenum may be so small as to admit only

* The Annual Frederick A. Packard Lecture, delivered before the Philadelphia Pediatric Society on February the 13th, 1917.

the finest probe. In some cases even water cannot be forced through, but usually the normal opening is only much narrowed. On longitudinal section the hypertrophy is seen to involve not only the pyloric ring but the entire antrum which may be two or three times its normal thickness. It has a pearly-white colour and seems to be almost destitute of blood-vessels. In recent cases there is usually a considerable amount of œdema. Microscopically the longitudinal layer, the submucous and the mucous coats are in most cases quite normal; the lesion is practically limited to the circular muscular layer. The circular fibres are much increased both in size and number. There is a true hypertrophy. The walls of the stomach are often found somewhat thickened and its cavity is generally dilated. The intestines are frequently empty and collapsed. There are no other lesions of importance.

It is our firm belief from our observation of these cases in the early weeks that in all hypertrophy precedes the tonic spasm; but that the hypertrophy continues long after the spasm has subsided we have absolute proof.

The clinical picture presented by a case of hypertrophic stenosis is a striking one and in a large majority of those seen it is remarkably uniform. An infant, usually breast-fed, who has nursed well, gained normally in weight, has had sufficient and well digested stools, and in fact has shown few or no other signs of disturbance begins to vomit persistently and forcibly. These symptoms have their most frequent beginning in the third or fourth week of life and in most cases their onset is abrupt and without assignable cause. To the forcible vomiting are added marked constipation, steady loss in weight, and all the symptoms belonging to failing nutrition. Careful examination reveals definite gastric peristaltic waves and in most cases a palpable tumour in the pyloric region. While a palpable tumour cannot be considered essential to the diagnosis, it will usually be found by a careful observer under favourable conditions.

Abnormal gastric retention is easily estimated by emptying the stomach two, three, or four hours after a test-meal by means of a simple suction apparatus composed of a rubber catheter, a small laboratory wash bottle and a suction tube. The test-meal we have usually employed is two or three ounces of breast-milk; diluted condensed milk answers the purpose, but one should not employ mixtures of unboiled cows' milk, as the coagulated milk in the stomach may block the tube.

The *diagnosis* of hypertrophic stenosis in most instances is easy,

provided one is familiar with the disease, for the symptoms in fully four-fifths of the cases are classical. In some, especially of the milder forms, several days of close observation may be necessary. Enumerated in the order of their diagnostic importance I would place the points in the following order:

(1) The history, if obtained from a reliable mother or nurse.

(2) Abnormal gastric retention, observations being repeated four or five times at least.

(3) Peristaltic waves, not of diagnostic value unless typical.

(4) The presence of a palpable tumour.

(5) Wasting, constipation, scanty urine, etc.

It is doubtful whether the X ray tells more than can be learned from careful observations of the gastric retention as described above. Furthermore, it must be remembered that these patients are very young, most of them in very bad condition, and that they bear the manipulation incident to successive investigation with the bismuth meal very badly.

The *medical treatment* of hypertrophic stenosis consists in careful feeding and stomach washing. The gastric lavage should be practised at first twice a day, later at longer intervals; it serves the purpose of emptying the stomach thoroughly of mucus and fermented food; the water used should be warmer than usual, that is, up to 112° F. If it can be secured, breast-milk is the preferable food, but one not rich in fat is desirable. The common practice of weaning as soon as symptoms develop is most unwise. In default of breast-milk a modified milk mixture low in fat should be employed.

With respect to quantities and intervals of feeding, cases respond differently. We have usually depended on from one to three ounces at three- or four-hour intervals, or small quantities and shorter intervals, especially if the food is breast-milk; with the longer intervals water should be given between feedings. In greatly prostrated patients hypodermoclysis should be used daily; from 150 to 250 cc. of 4 per cent. dextrose may be given in a saline solution at one time. Rectal feeding is of little assistance. The bowels are usually best moved by enema. Drugs and local applications of heat over the epigastrium for the purpose of allaying the spasm I believe to be of little value. The weight should be carefully watched and taken daily as it is the best guide to the patient's condition and progress.

*Surgical treatment.*—In 1908, Dufour and Fredet collected published results in 135 operations. The principal groups were:

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| Gastro-enterostomy . | 52 cases with | 22 recoveries. | |
| Divulsion . . . | 36 „ | 21 „ | |
| Pyloroplasty . . | 22 „ | 13 „ | |
| Various modifications and combinations . . | 25 „ | 12 „ | |
| | 135 | 68 | — Mortality 50 per cent. |

In 1913, Rammstedt, of Munster, reported a successful case in which he simply divided the circular muscular layer of the pylorus by external incision. His case, a typical one, made an excellent recovery. He advocated this procedure as a substitute for the older operations—gastro-enterostomy, divulsion and pyloroplasty—then in vogue. The great advantages he claimed were that the stomach was not opened and the duration of the operation was much shortened. In his case it required but fifteen minutes as compared with thirty to fifty minutes needed for most of the other operations.

Rammstedt's operation of external muscle division has been done in the hospital up to January, 1917, in sixty-seven cases, all but one of these by Dr. Downes. Up to January, 1915, it was done occasionally, in all upon six patients. But since that date it has been done exclusively in the institution. In nineteen of the first twenty cases, in order to make sure that the constriction had been completely divided, the stomach was opened and a sound passed through the pylorus. This was then decided by the surgeon to be quite unnecessary and hence discontinued in the last forty-seven operations. It certainly adds to the operative risk.

Including my private cases and those operated on at the Babies' Hospital there were 41 gastro-enterostomies with a mortality of 51 per cent.; of the 28 cases done by Dr. Downes the mortality was 43 per cent.; of the 67 cases in which the Rammstedt operation was done the mortality was but 24 per cent.

The advantages of this operation are evident to one who has had experience with the other operations proposed. First in importance may be mentioned the time required. Seldom does the entire operation consume over fifteen minutes and it is often completed in ten. The stomach is not opened and the risks of non-union, leakage, and peritonitis are eliminated, and a minimum handling of the viscera is required. So much for the surgical aspects. Our experience has shown that the shock is much less severe, the temperature reaction is less marked, food can be pushed more rapidly and disturbances

of digestion, particularly diarrhœa which has been so troublesome a symptom after gastro-enterostomy in more than half our cases, is very much less frequent and less severe. This is undoubtedly due to the fact that the food passed normally into the duodenum instead of directly into the jejunum.

*After-treatment.*—The success of operative measures in this condition is dependent in no small degree upon the after-treatment. For a number of days after the operation the lives of these little patients often hang by a very slender thread, and errors in judgment, especially with regard to feeding, often have the most disastrous consequences. It is then of the highest importance not only that the operation be done by a skilled surgeon but that the infant after the wound is closed be under the care of one equally skilled in the post-operative management. The problems presented to the physician are often more difficult than those of the surgeon. Hence hospital care is for most patients indispensable.

*Medical* v. *surgical treatment.*—On the whole is medical or surgical treatment of hypertrophic stenosis in infancy to be advised? It must be admitted that there appears to be considerable difference of opinion among those with some experience in this disease. Some physicians have reported groups of cases with so low a mortality as to lead to the inference that nearly all these patients recover without resort to surgery. While some surgeons have taken the position that the condition is purely a surgical one and that the patient should be turned over to them as soon as the diagnosis is made; that medical treatment is in most cases only waste of time and jeopardises the life of the child because he does not come to the surgeon until so late that the chances of successful operation are greatly reduced. To what is this difference of opinion due? Are the physician and the surgeon talking about the same clinical and pathological conditions? I do not believe that they always are. Hypertrophic stenosis, we would repeat, is a definite pathological entity, though the cases differ much in severity. This is the condition that the surgeon and the medical consultant see. There are, I believe, a number of pathological conditions in early infancy associated with vomiting which have many of the symptoms seen in hypertrophic stenosis, but which on close study are seen to be quite different. There are also different conditions in which there is visible gastric peristalsis—even this symptom does not put the cases in the same class with those we have been discussing. A large proportion of such cases recover with medical treatment only, as do also most of those of hypertrophic stenosis of the milder type,

although probably in very many of them the correct diagnosis is not made.

If the child is seen in private practice with the possibilities of the best care and most intelligent feeding—particularly breast-feeding—if the weight is stationary or the loss in weight is not great and the child still in good condition, if the vomiting is only two or three times a day, if the stools are fæcal, and if no surgeon with experience in these cases is available, one is justified in waiting.

On the contrary, if the weight has fallen to six pounds or below and the loss is still going on, if the vomiting is continuous, if there is marked gastric retention, if the stools contain no fæcal matter, no time should be lost, but immediate operation advised, particularly in a hospital, whether a tumour is palpable or not.

No better argument can be adduced for operative treatment than a comparison of our results at the Babies' Hospital in the three periods into which I have divided our experience. During the first period up to the end of 1911 our policy was operation only after a prolonged trial had been made of medical treatment, surgery being looked upon as a last resort. Our mortality for this period was 58 per cent. of forty-one cases, twenty-four of which were treated without operation, the percentage results in the operative and non-operative cases being the same. The average age of the patients was seven and six-tenths weeks, and the average weight at first examination was seven and seven-tenths pounds.

Turning now to the final results in the operative cases we will first consider those after gastro-enterostomy. Of the twenty who recovered, one died two weeks and one four weeks after operation, of entero-colitis; one died after four months, of diphtheria; one after two years from accident and one was lost sight of. The remaining fifteen patients have been followed up to the last few weeks. One seen after eleven and a half years is a well-grown, normal boy. Four were followed for from four to five and a half years; all were then quite well, but one had suffered from occasional attacks of vomiting up to his third year. Of eight followed for two to two and three-quarter years all were strong and healthy; but one suffered from vomiting attacks for nearly a year after operation. Judging from histories of these patients the operation of gastro-enterostomy in no wise interferes with the normal growth and development of children.

The Rammstedt cases have necessarily been observed for a much shorter time; but long enough to establish the fact that this operation does relieve the obstruction at once and completely. Of the

fifty-one infants who recovered, five died subsequently; three of the infants within two months after operation of causes connected with the digestive tract. One of these was discharged in good condition on the thirteenth day but died of marasmus five weeks later. Another also discharged in good condition died four weeks later of marasmus at home, the mother having lost her milk. The third did well for nine days, was upset by over-feeding and died of gastro-enteritis on the twenty-fifth day after operation. In none of these could the operation be assigned as a cause of death. Two other infants entirely recovered from their gastric condition but died from respiratory infections later; one of empyema three months, and one of pneumonia four months after operation.

The remaining forty-six infants have been followed up to the last few weeks. Many of them have been seen by me personally, others by some member of the hospital staff. From the remainder who live at a distance reports by letter have been received from parents or the family physician. The time elapsing from the operation to the date of last report is as follows:

In four cases between two years, two months, and three years.

In fourteen cases between one year, six months, and two years.

In twelve cases between ten months, and fifteen months.

In eleven cases between five months and eight months.

In five cases between one month and four months.

When seen these children were almost without exception in the best of health; they were plump and rosy-cheeked, nearly all above average weight, and as fine a group as one would care to see.

Our experience, I think, warrants the conclusion that the Rammstedt operation meets the indications in this condition. If this simple procedure does this, then there is no longer any justification for the other more serious surgical procedures which have been employed in the past. Our mortality was only about half that which followed the operation of gastro-enterostomy. The statistics here quoted hardly represent what may be expected when this operation is done on private patients and done early.

## Conclusions.

(1) Hypertrophic stenosis of the pylorus in infancy is a pathological entity. It should not be confused with other pathological conditions which may be accompanied by vomiting and occasional gastric peristalsis.

(2) Many of the milder forms recover with only medical treatment.

(3) All those which do not improve under such treatment in the course of two or three weeks, and the more severe types in a much shorter time, should be treated surgically.

(4) The symptoms which indicate surgical intervention are rapid loss in weight, persistent vomiting, and forcible, gastric peristalsis ; the presence of a palpable tumour and abnormal gastric retention aid much in diagnosis.

(5) The X ray reveals nothing of importance which cannot be discovered by a study of gastric retention and without its dangers.

(6) The cases which come under observation after four or five weeks of vomiting and marked loss in weight are best treated by operation as soon as the diagnosis is established.

(7) The earlier operations of gastro-enterostomy, divulsion, pyloroplasty, etc., were unduly severe and prolonged ; they should be abandoned for the simple external division of the circular muscular fibres proposed by Rammstedt.

(8) Results by the same operator, upon the same class of cases in the same institution and with the same treatment show the great superiority of the Rammstedt operation to gastro-enterostomy and to medical treatment.

(9) Cases of gastro-enterostomy followed from four to eleven years indicate that growth and development are not impaired by the operation.

(10) Cases followed two and three years after the Rammstedt operation show no interference with health and progress.

(11) Cases not operated on usually show no symptoms after the first year. Yet the possibility that this condition may be the basis of pyloric obstruction in later life undoubtedly exists.

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## ACQUIRED SYPHILIS IN INFANTS WITH REMARKS ON CRÈCHES.

By George Pernet, M.D.,

*Dermatologist to the West London Hospital.*

I have recently had under my care two cases of acquired syphilis in infants, which are of some interest at the present moment from several points of view.

The first case was that of a male infant, aged 18 months, who came under observation in my out-patients on February the 23rd, 1917 (N. 4615). The duration of the skin trouble was fourteen days,

and it had begun about the buttocks as "boils," so the mother described them, one on each buttock. When I saw the child, the skin was more or less generally involved from head to foot with the exception of a few areas here and there, which were normal in appearance. The type was that of a generalised dermatitis exfoliativa, but the tint was sombre and dull, and as far as one could judge the affected areas appeared to be infiltrated, which made it suspicious. About the head and face there were numerous dirty thickened adherent scales, the skin looking cracked, especially about the naso-oral region. The rest of the eruption was also more or less scaly, the squamæ being rather adherent. Altogether the picture did not fit in with what has been described as dermatitis exfoliativa neonatorum, the age of the child and the appearances being against that diagnosis, and made one instinctively think of syphilis. *Ça sentait la syphilis*, as the French would put it. Otherwise the child appeared well nourished and cared for.

The mother had had nine children, but no miscarriages. There were scars about her breast from old mammary abscesses.

The infant was admitted to our Hull ward for children for further observations, a superfatted linimentum calaminæ being ordered in which the patient was to be wrapped up. When next seen three days later, a characteristic superficial infiltration of the skin *en nappe* could be plainly made out about the thighs. This had spread down them from the buttocks. Such a condition is not unusual in congenital syphilis neonatorum. But at 18 months, there could be no question of congenital syphilis, the whole trouble pointing definitely to acquired syphilis. In congenital syphilis the earliest symptoms occur, as a rule, within the first three months of life, though some observers have extended this period to six months and more. But that is not my experience. It is more probable that recorded syphilitic rashes starting as late as six months after birth were really of accidentally acquired origin and that point missed. Usually the cutaneous manifestations of congenital syphilis show themselves in the first month or two of separate life. As to dermatitis exfoliativa neonatorum that condition is erythematous and occurs in the first few weeks of life, generally terminating fatally.

The child was at once put on pulv. hydrarg. c̄ creta gr. i ter die, p.c., and the areas, which were still thickly scaly, especially the head and face, were soaked in olive oil. A few days later, the infant was found to have improved considerably all round and did better and better as time went on, the skin becoming pale and smooth, and the features recognisable. Unfortunately, owing to an outbreak of

measles, the ward had to be closed. A week or two after this, and no doubt owing for one thing to the severe cold weather, the child was brought to my out-patients looking very ill and fighting for breath, though the face itself, from my point of view, was quite clear. The case was referred to the medical clinic and turned out to be a lobar pneumonia. Unfortunately again, the child could not be taken in owing to lack of accommodation.

I may add that the mother's Wassermann was negative. The child's was not done. But there is no doubt at all in my mind about the syphilitic nature of the rash in his case from the clinical aspect. The immediate improvement and clearing up of the skin under mercury supported that opinion.

Whether in this infant, the original lesions on the buttocks, which the mother referred to as "boils," were primaries is possible, though nothing definite could be made out in this direction when the infant was first seen owing to the mess it was in, nor later when the accumulated and thickened scales had been removed. The primary infection may have taken place by some other channel which remained undiscovered. Even in adults, a primary chancre cannot always be found in undoubted secondary syphilitic rashes.

The second case was that of a male infant, aged 9 months (N. 4790). The mother stated the rash had commenced on the arms, face, and fingers three months before bringing the child to my clinic on April the 3rd, 1917. She had been using sulphur ointment. There were, however, no indications of scabies. The rash about the neck and body was papulo-macular and typical of acquired secondary syphilis as observed in older patients. The peri-anal region was involved, presenting small circular ulcerations, quite syphilitic in aspect and not like the lesions of Jacquet's *Erythème érosif des nouveau-nés*. The cry of the infant was distinctly hoarse and had been so for three weeks. Occipital, inguinal and left epitrochlear adenitis was present. The picture was that of acquired syphilis, but no sign of a primary sore could be discovered. A negative point of that sort, however, counted for nothing in the face of the typical and obvious objective positive signs.

The Wassermann in the mother was negative. Nor could any syphilitic symptom, old or recent, be discovered about her. The Wassermann in the infant was positive, which was to be expected. Had it been by some chance negative, I should have disregarded that, for the diagnosis of syphilis was undoubted on clinical grounds. The infant did well on pulv. hydrarg. c̄ creta gr. i.t.d., p.c.

I need not here discuss the matter of the age of the patient

anew, having already done so in connection with the first case described.

A matter of first importance in cases of acquired syphilis in infants is to warn the mother not to put the child to the breasts to comfort it and still its cries, nor *à fortiori* to go on suckling the baby, especially as lactation is in hospital practice apt to be prolonged beyond nine months. In this case, fortunately for the mother, the child was not being breast-fed.

I may say that it is a long time since I have come across a primary chancre of the maternal breast, but in such times as we are passing through an origin of that kind may come under observation.

An infant with acquired syphilis accidentally contracted in some way or other may become a danger not only to its mother, but to others also. Motherly good samaritans may put a strange infant to their breast. This is not unusual among the poor as I know from experience of the sad results. Again, syphilis contracted in this way by a stranger may be conveyed to her own baby and to her husband, thus establishing a vicious circle of infection, and maybe giving rise to a house or home epidemic where there is over-crowding and great promiscuity among the members of a family.

Now a word as to crèches. At the present time, crèches are being established *urbi et orbi* in order to release the mothers for ammunition and other work. It therefore behoves those in charge, many of them no doubt well-meaning volunteers, who have little or no knowledge of the ways in which syphilis may spread from one individual to another, either directly or indirectly, to be on their guard. There is a danger of infection from babies suffering from congenital or from acquired syphilis as in the two cases I have just described, being communicated not only to other babies, but to the attendants also unless these are warned of the danger and trained to avoid it. Teats, feeders, the so-called baby's comforter and so forth, must not be bandied about from one child to another. An infant suffering from syphilis should have its own things and the nurses should wear rubber gloves when attending to it. But better still, infants with active syphilis should not be admitted to crèches at all. This a council of perfection. The mothers of such infants, or those in charge of them, should be plainly told of the dangers of infection, especially if the babies have to be confided to the care of others to release the mother for work outside her home.

# THE TREATMENT OF ENLARGED CERVICAL LYMPH-NODES IN CHILDREN. A PAPER FOR THE GENERAL PRACTITIONER.

By Charles Greene Cumston, M.D.,

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It is of the utmost importance to make an exact diagnosis of the nature of enlarged cervical lymph-nodes in children, because the appropriate treatment will naturally differ according to the ætiology of the enlargement. If one finds a single enlarged lymph-node it is more than probable that some irritative causal factor is in play, and by searching for and removing this element, the gland will return to its normal state.

Enlarged lymph-nodes in the neck due to some local cause, whether they assume an acute or chronic evolution, require the same treatment. The head and face of the child must be maintained in a state of absolute cleanliness. Parasites require an energetic cleansing of the scalp with a 1 in 500 solution of sublimate, after which the scalp is to be rubbed with grey ointment or camphorated alcohol and the ova removed by the applicatien of hot vinegar and a fine toothed comb.

Should there be an eczema of the scalp the diet must be regulated and it will generally be found to be too plentiful. Locally, the scalp must be cleaned and antiseptically dressed with compresses wetted with tepid boracic acid solution. Ointments of zinc oxide, and salol in which vaseline or starch glyceride as excipients are used are bad from the fact that they keep up a constant humidity of the parts to which they are applied and consequently favour the extension of the process in cases of moist eczema. Therefore, it has been my practice to use in their stead powders of an inert nature, such as talc, salol, etc.

Lacrymal fistula demand the care of the ophthalmic surgeon, while facial erysipelas and mumps are to be treated according to modern practice in such cases.

The stomatitides require above all a strict diet, which for a few days should be liquid. Buccal antisepsis is easily carried out, the subject being made to gargle several times daily with a saturated solution of boracic acid or some solution such as the following:

℞. Potass. chlorat., 2 to 5 grm. (according to age).
Syr. rub. id., 30 grm. (℥j).
Aquæ, 110 grm. (℥iv).

M.D.S. A dessertspoonful to be gargled and swallowed every two to three hours.

Disturbances of dentition are mitigated by buccal antisepsis. Loose or decayed teeth should be removed, the operation of extraction being an easy matter in these cases, without the use of local anæsthesia.

The fever present in these cases can be well kept in check by the use of suppositories containing from three to four grains of either quinine sulphate or acetanilide. If the child is restless or if there be insomnia, one to two grains of chloral may be added to the suppository. Rest in bed is necessary, and the child should be submitted to a milk diet. A soap-sud or glycerine enema is to be administered if there is constipation.

Locally one should resort to revulsion, such as tincture of iodine, and if there be a slight angina proper gargles are to be exhibited.

Chronic angina, usually characterised by an hypertrophy of the tonsils, is to be treated by cod-liver oil, a stay at the sea-side or at spas having chloride or sulphurous waters, but above all a local treatment is requisite. All therapeutics should give place to removal of the affected organs, but such surgical interference must be preceded by a careful antisepsis of the buccal, nasal and pharyngeal cavities. This may be left to throat specialists, although I must confess, their therapeutic acumen has left much to be desired in the past.

Enlarged cervical lymph-nodes due to some general cause, such as the exanthemata, or any other acute process, require no particular treatment. When painful, hot compresses and oil inunctions will calm the discomfort. On the contrary, chronic adenitides must be seriously treated, and I shall now consider them in turn.

Tuberculous adenitis, which I believe must be looked upon, not as a purely local lesion, but as a defence set up by the organism against a generalised infection by Koch's bacillus, cannot be properly treated by limiting oneself to the care of the enlarged lymph-nodes themselves, and it is absolutely necessary to act against the general infection.

Assuming that this is the correct view of the process, one must first carry out a general treatment which will result in favouring the defensive reactions of the organism ; and, secondly, a local treatment

which will act directly on the lymph-nodes, to aid forthwith in modifying their absorption.

The general treatment has for its principal handmaid a climatic cure. The child should be sent to the sea-side and there remain as long as possible, let us say several months. He should live out of doors all the time. Sea baths, or sand baths ought to be taken twice daily, while sun baths must be indulged in frequently and lengthily. They are to be most highly recommended. I need not insist upon the excellent results obtained.

When it is impossible to send the child to the sea-side, one may very well prescribe a treatment of mineral waters, such as Salies-de-Béarn or Salins-Montiers, which will undoubtedly be found of great efficiency in such cases. Unfortunately, I am not familiar with the English spas, but there are waters in Great Britain which will, naturally, take the place of those of France. In some cases it will be advantageous to combine the two treatments, paticularly when the child presents a marked general atony when salt-baths alone are not sufficient to cause an improvement in the local conditions. But when the two treatments are combined the general health improves more rapidly and the lymphatic lesions rapidly regress.

Excellent results may be obtained by the local application of compresses soaked in water containing sodium chloride. The length of time of application and the temperature of the compress must be guided by the effects obtained in each particular case.

Sea water is very valuable in the treatment of tuberculous adenitis. It decreases the nitrogen changes, likewise the co-efficient of oxidation. The effect is just the contrary to mineral water baths having salt as a basis which increase the nitrogen changes and oxidation. Sea-water baths are advantageously given when the subject presents phenomena of intense combustion, with or without azoturia.

If the lymph-nodes are moveable and hard, salt water baths are indicated, instruction being given to the nurse to see that the child's neck is completely immersed, in order to obtain both a local and general action. According to the way the subject reacts a hot or cold general shower-bath may be added.

If the lymph-nodes are adherent to the surrounding structures or if they are progressing towards suppuration surgical interference is indicated. If the subject comes under treatment after the glands have broken down and have discharged their contents, leaving fistulæ as a result, I know of no more efficient treatment than that of the sulphur waters of Schinznach-les-Bains in Switzerland, and I have

observed some really remarkable cures obtained at this spa in these particular cases.

The use of proper drugs must not be overlooked, such as the cacodylate of sodium. Cod-liver oil is of great benefit, likewise the phosphoglycerites. The former may be combined with other drugs as in the following formula:

℞. Ol. jecor. aselli, 500 grm.
Syr. ferri. iodid., Q.S., according to age.
Glycerini, 100 grm.
Sodii arseniat., 3 grm.

M.D.S. Three to four dessertspoonfuls daily, according to the age of the child.

I have also obtained good results from the administration of the *sirop iodo-tannique* of the French Codex. Its composition is:

Iodine, 2 grm.
Tannin, 4 grm.
Aq. dest., 360 grm.
Sacchar. alb. 640 grm.

Of this from two to four dessertspoonfuls daily according to age.

The following combination is good:

℞. Ol. jecor. aselli.
Syr. calcii lactophosphat.
Glycerini, āā, 100 c.c.

M.D.S. Shake well. Three to four dessertspoonfuls daily.

I do not think that treatment by the various tuberculins has given sufficient evidence of good results as to advise their use in these cases.

As to local medication when the lymph-nodes are very large or have undergone caseification, heliotherapy, or injections of camphorated naphthol or camphorated thymol are useful. But from the purely surgical standpoint I cannot but believe that a properly conducted removal by operation will give the best results and is the treatment to be advised.

Opinion varies as to the proper treatment of *lymphadenoma*. Those who maintain the theory of a lymphogenous diathesis advise the use of arsenic and iodide of potassium. I shall return to this question in a moment.

On the other hand, those who look upon lymphadenoma as a special disease of an infectious nature resort to surgical interference. But the complete removal of the masses of enlarged lymph-nodes can only be undertaken when these masses are not too numerous. If

they are extensive or generalised the surgeon could not dream of removing them all and therefore the administration of internal remedies must be had recourse to, and I am particularly a partisan of the use of injections of Fowler's solution or cacodylate of sodium.

Leukæmia requires a substantial diet and life in the open or at the sea-side. Cod-liver oil and Fowler's solution, iodine or the iodides, and injections of normal saline solution are indicated, and from the result obtained by Combe of Lausanne, I should not hesitate to prescribe the administration of fresh bone-marrow of cows or calves.

Lymphosarcoma is a purely surgical affection and need not be discussed in this short paper, the object of which has been to consider the treatment of cervical adenitis in children from the view-point of the general practitioner based on the experience of a surgeon.

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## CEREBRAL DEGENERATION AND EPILEPTIFORM FITS, WITH AMAUROSIS, IN AN ONLY CHILD.*

By F. Parkes Weber, M.A., M.D., F.R.C.P.Lond.

The patient, T. L—, aged $6\frac{3}{4}$ years, is a fairly well-grown girl, born in London, the only child of Hebrew parents. The father was born in Russia and the mother in Russian Poland. The child is somewhat mentally deficient, subject to occasional slight epileptiform convulsions, and almost completely blind in both eyes. She can probably only distinguish light from darkness. Dr. C. Markus has examined the eyes carefully, and reports as follows: "The retinal blood-vessels are extremely small (narrow); the optic discs are uniformly pink, slightly pale, but not definitely atrophic; the maculæ luteæ appear as small red-brown spots and are not distinctly abnormal. The vessels and optic discs resemble what one sees in cases of retinitis pigmentosa, but the characteristic pigmentary change of fully-developed retinitis pigmentosa is altogether absent."

There is no evidence of disease in the thoracic and abdominal organs, and the urine is free from albumin and sugar. Nor are there any signs in the child of congenital syphilis, excepting that the blood-serum (Dr. H. Schmidt, March, 1917) gives a *weakly*

* The patient was shown at the Royal Society of Medicine, Section for the Study of Disease in Children, March the 23rd 1917.

positive Wassermann reaction ; the reaction was, however, apparently found to be negative on a previous occasion at another hospital. Moreover the cerebrospinal fluid (March, 1917) gives a negative Wassermann reaction. The knee jerks are present.

As stated above, the patient is the only child, and apparently the mother has been only once pregnant. The mother, aged 31 years, seems to be well ; her Wassermann reaction (March, 1917) is doubtful. The father, aged 33 years, also looks well, his sight is not deficient, and the ophthalmoscopic appearances in his eyes are normal (Dr. C. Markus). He claims to have enjoyed good health and never to have had any venereal disease, but his Wassermann reaction (March, 1917) is weakly positive. The patient's paternal grandfather, a well-developed man, aged 58 years, is blind in both eyes. The blindness developed eighteen years ago, and there is bilateral optic nerve atrophy (Dr. C. Markus). In other respects he has enjoyed good health, but his blood-serum gives a positive Wassermann reaction (Dr. H. Schmidt, March, 1917).

The patient is said to have been a bright and intelligent child up to the age of 5 years. Her tonsils were excised at the age of 3 years, and her bowels always tended to be confined. After the age of 5 years signs of cerebral degeneration commenced ; she lost the power of memory and her speech deteriorated. About May, 1916, she commenced to suffer from transient " fits," and soon afterwards her sight was found to be failing. According to her mother she could see quite well nine months ago, but then her visual power gradually diminished, and for the last four months she has been almost blind. The " fits " are transient epileptiform, of the " petit mal " kind, lasting about " a couple of moments." The patient is observed to " turn her eyes," and there are convulsive movements of the body, but no involuntary passage of urine or fæces has been observed in connection with the fits. After them she appears tired and sleepy. Ten or eleven such fits were observed up till the end of the year 1916. Since then only one has been noted—namely, about the commencement of February. The mother attributes the diminution in the fits to medicinal treatment, which was commenced in August, 1916. Mercurial inunction is now to be tried (March the 16th, 1917).

### Remarks.

In spite of the absence of definite macular changes and of family history, the case may be allied to F. E. Batten's second group of maculo-cerebral degeneration. The *first group* includes the cases of

the Tay-Sachs type of so-called "family amaurotic idiocy," occurring in infancy and practically exclusively in Hebrew families, though E. A. Cockayne and J. Atlee have recently (1915) described an apparently typical case in an English male child, aged 1 year. Batten's *second group* is the group of "juvenile progressive cerebral degeneration with amaurosis, with or without macular and retinal changes," including the cases of "family maculo-cerebral degeneration," and of the so-called "juvenile form of family amaurotic idiocy," the various cases of Spielmeyer, Mülberger, Vogt, Bielschowsky, Mayou and Batten. The main features of Batten's second group are loss of intellectual faculties, loss of vision, and loss of motor power; but the symptoms vary in the order in which they appear, in the age at which they first appear, and in the rapidity of progress; no special racial proclivity has been observed, such as there is in the Tay-Sachs type of family amaurotic idiocy.

In regard to a possible relationship between Batten's second group of maculo-cerebral degeneration and retinitis pigmentosa, I would refer to the remarks of M. S. Mayou, R. D. Batten, and others, in the discussion on a case of "pigmented degeneration of the retina, associated with epileptic fits," shown by F. E. Batten at the Section of Ophthalmology on November the 1st, 1916. In retinitis pigmentosa, which may be familial, and may also be associated with idiocy or deaf-mutism, the symptoms may commence in early childhood, or possibly even congenitally. The ophthalmoscopic appearance is characterised at the commencement by narrowness of the retinal arteries and veins, and by a look of "greyness" in the retina; the characteristic spots of pigmentation in the retina are not seen at first, and in some "atypical" cases never appear at all. A certain resemblance of the ophthalmoscopic appearance in the present patient to that observed in early retinitis pigmentosa has been noted above.

In the present case, although antisyphilitic treatment is being tried, I hesitate to attribute the condition to syphilis. The fact of the child being of Hebrew parentage has probably no connection with the disease. The negative Wassermann reaction with the patient's cerebrospinal fluid is against the diagnosis of commencing juvenile general paralysis, or of syphilitic disease at the base of the brain.

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## LIPODYSTROPHIA PROGRESSIVA IN A MALE.*

By F. Parkes Weber, M.A., M.D., F.R.C.P.Lond.

The patient, J. H—, aged 13 years, born in London, of English parentage, was moderately fat in the face and body till the age of 8 years. He then began to look thinner in the face, though in other respects he continued to appear and feel perfectly well. The loss of subcutaneous fat gradually progressed, and for the last three years there has been practically no fat left in the face and neck excepting in the orbits. The arms, thorax, and abdomen are to some extent affected in the same way, but on the gluteal regions and lower extremities the fat covering is fairly good. The mother, indeed, thinks that the boy has lately been putting on fat in the buttocks and thighs. The illustrations (see figs. 1 to 3) show his appearance at the age of 1 year, at the age of 7 years, and as he now is (aged 13 years). In other respects there is not much to be said. There are no signs of disease in the heart, lungs, or abdominal organs. The urine is free from albumin and sugar. He is of quite average intelligence, and presents no symptoms of disease in the nervous system. In March, 1913, he underwent a radical mastoid operation for middle-ear disease (right side), and in January, 1916, an aural polypus was removed from the same ear. There can be no

* The patient was shown at the Royal Society of Medicine, Section for the Study of Disease in Children, April the 27th, 1917.

doubt that the case is a typical one of lipodystrophia progressiva. The aural disease might have been supposed to have acted as an exciting cause if it had preceded the fat atrophy in the face, but according to the mother the fat atrophy was noticed before the onset of any obvious ear disease.

It should be mentioned that the atrophy of subcutaneous fat in the upper part of the trunk has produced a condition of what is known as "elastic skin," that is to say, a fold of skin can be stretched out abnormally far from the bony and muscular wall of the thoracic cage without causing discomfort or pain. To such a condition of

(1)

(2)

(3)

Fig. 1.—The patient, J. H—, at age of 1 year.
Fig. 2.—The same patient, aged 7 years.
Fig. 3.—The same patient, at present time, aged 13 years.

"elastic skin" the ambiguous term "dermatolysis" has sometimes been applied. It would be interesting to know whether any of the so-called "elastic-skinned men" were likewise examples of "lipodyatrophia progressiva."

The boy's father and mother appear healthy. The mother has had three children and two miscarriages. Both the other children are living and healthy (aged respectively $14\frac{1}{2}$ years and 11 years).

I am indebted for the case to the kindness of Dr. C. E. Lakin and Dr. E. A. Cockayne.

Dr. E. A. Cockayne has likewise given me particulars of another case of lipodystrophia progressiva in a male. The boy, when he saw him in Chelsea in 1914, was aged about 11½ years, and felt perfectly well, but the doctor of the school had sent him up for special examination on account of the extraordinary thinness of his face. This wasting of the subcutaneous fat had commenced two or three years previously, that is to say, when he was aged about 9 years. He appeared otherwise healthy. There was no glycosuria. The trunk and limbs, though thin, did not show the extreme loss of subcutaneous fat that was noticeable in the face. He was fairly muscular and the deeper structures of the face were not wasted. Unfortunately the patient has been lost sight of, but I think the case was probably one of lipodystrophia progressiva.

In my last paper on the subject (13) I included a table of published

### Lipodystrophia Progressiva.

### Table of Certain or Probable Cases in Males.

*The numbers in parentheses refer to the literature on the subject given at the end.*

| Reference. | Age of patient when the affection was first noticed. | Age of patient when the case was described or last seen. | Parts affected by the fat atrophy. |
|---|---|---|---|
| Present case | 8 years | 13 years | Face, neck, and trunk. |
| E. A. Cockayne, recorded in the present paper | About 9 years | About 11½ years | Chiefly the face. |
| Gerstmann (10) | 10 years | 32 years | Face, neck, upper extremities, and trunk as far as the pelvic bones (inguinal folds folds and the iliac crests). |
| Gerhartz (11) | 6 years | 29 years | |
| Husler's first case (8 and 9)* | 6 years | 10 years | Face. |
| Husler' second case (8 and 9) | 6½ years | 9 years | Chiefly the face and neck. |
| Hertz and Johnson, first case (5) | 24 years | 26 years | Face and neck. |
| Hertz and Johnson, second case (6) | About 37½ years | 38 years | Face. |
| Batty Shaw (4) | 2½ years | 10 years | Face. |
| J. S. Bury (7) | ? | Youth | Face. |

* This patient died about three years later, in his fourteenth year, of epidemic cerebro-spinal meningitis. At the necropsy his thymus gland was found still present, but otherwise, excepting for the fatal meningitis, the result of the post-mortem examination was practically negative.

cases of lipodystrophia progressiva in females, and I now give a table of male cases, including several cases of so-called "bilateral facial atrophy," in which the atrophy seems to have been confined to the subcutaneous fat. As to whether lipodystrophia progressiva may occur in a unilateral form or not I made the following observation in the discussion on my last paper:

"Since in certain cases of facial hemiatrophy the atrophic process has, I think, been supposed to be limited to the subcutaneous fat, it is just conceivable that such cases of hemiatrophy of the face (if the atrophy does not later on involve tissues other than the subcutaneous fat) may represent *minor* and *unilateral* forms of lipodystrophia progressiva, though such forms might not of course, strictly speaking, be termed progressive."

LITERATURE ON LIPODYSTROPHIA PROGRESSIVA.

*Further references will be found in my last paper* (13).

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(2) H. CAMPBELL.—'Trans. Clin. Soc. Lond.,' 1907, xl, p. 272. See also H. Campbell, Proc. Roy. Soc. Med.,' Neur. Sect., 1913, vi, p. 71.

(3) F. PARKES WEBER.—*Ibid.*, 1913, vi, pp. 127–133.

(4) H. BATTY SHAW.—'Trans. Clin. Soc. Lond.,' 1905, xxxviii, p. 222.

(5) HERTZ AND JOHNSON.—'Proc. Roy. Soc. Med.,' Clin. Sect., 1913, vi. p. 92.

(6) *Ibid.*, 1914, vii, p. 11. See also Hertz and Johnson, "Two Cases of Bilateral Atrophy of the Face," 'Guy's Hosp. Repts.,' Lond., 1913, lxvii, p. 112.

(7) JUDSON S. BURY.—"Diseases of the Nervous System," Manch., 1912, p. 267, fig. 102.

(8) J. HUSLER.—'Zeitschr. f. Kinderheilk.,' Berlin, 1914 (Originalien), x, p. 116.

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(10) J. GERSTMANN.—'Wien. klin. Wochenschr.,' 1916, xxix, p. 1209.

(11) H. GERHARTZ.—'Münch. med. Wochenschr.,' 1916, lxiii, p. 823.

(12) F. PARKES WEBER.—"Lipodystrophia progressiva," 'Quart. Journ. Med.,' Oxford, 1917, x, p. 131.

(13) *Idem.*—"Lipodystrophia progressiva," 'Proc. Roy. Soc. Med.,' Sect. for the Study of Dis. in Child., 1917, x, p. 81, and BRITISH JOURNAL OF CHILDREN'S DISEASES, 1917, xiv, p. 81.

## CONGENITAL WORD- AND LETTER-BLINDNESS—CONGENITAL ALEXIA, WITH AGRAPHIA, WITHOUT APHASIA.*

By F. Parkes Weber, M.A., M.D., F.R.C.P.Lond.

The patient, O. H. S—, aged 10 years, a bodily well-developed boy, of apparently average intelligence, has had great difficulty at school because he can practically not read or write. He has, indeed, gradually learned to read and write a few letters of the alphabet, notably the first two or three letters, but he often makes mistakes, for instance, he often says that the letter "D" is "B." As in some other cases, it seems to make no difference whether the letters are small or capital letters, printed or written. He has learned to read and write Arabic numerals relatively well, and this corresponds to the observations of James Hinshelwood and others, that the recognition of Arabic numerals is readily acquired in cases of congenital word-blindness. When one tells him to write down his age (9 years), he at once writes down 9, as an Arabic numeral, but cannot write the word *years* after it. He can add up figures a little, but is certainly extremely backward for his age in arithmetic. He has learned to write his own name, and can recognise his name when someone else writes it. In regard to most words, however, when he tries even merely to copy them, he often makes mistakes, and copies them without understanding what they mean. He recognises objects and pictures of objects, and the meaning of pictures and picture-stories. There is no word-deafness and no aphasia. He pronounces words well and talks fluently, if he is not shy, and has learned to recite and sing various songs.

Dr. R. Gruber, to whom I am indebted for the case, reports that the patient's eyes (including ophthalmoscopic appearances) and vision are quite normal. He is not colour-blind.

The patient's mother says that she, as a child, was somewhat backward in learning to read. She has had only one other child, a boy now aged 8½ years, who is not word- or letter-blind.

I find nothing abnormal in the patient's thoracic and abdominal organs, nor in the urine, sexual organs, mouth, or nervous reflexes. The Wassermann reaction (Dr. H. Schmidt, April, 1917) in the patient is positive. In his mother and brother it is likewise positive. The bridge of the brother's nose is somewhat depressed. His

* The patient was shown at the Royal Society of Medicine (Section for the Study of Disease in Children), April the 27th, 1917.

father died at the age of 37 years in a lunatic asylum (general paralysis ?). His mother looks healthy, and has had no miscarriages (she has only twice been pregnant).

The case seems to be very similar to Dr. T. R. Whipham's case of "Congenital Word- and Letter-Blindness," lately shown before this Section,* but Dr. Whipham's patient was a girl (aged 8 years), and out of sixty-four recorded cases to which he alludes only seventeen were in females. I shall not here go over all the points so recently discussed by Dr. Whipham. His case, moreover, resembled the present one in giving a positive Wassermann reaction; but it is doubtful whether there can be any direct relationship between inherited (congenital) syphilis and conditions allied to congenital word-blindness, though it is supposed by some authorities that a congenital syphilitic taint favours disorders of growth and development.

An interesting feature in the present case is that apart from the word-blindness the boy seems intellectually almost normal, so that he is an even better example of pure word-blindness than is Dr. Whipham's case. Such children may ultimately manage to make themselves useful in life. Dr. G. E. Shuttleworth has told me that one of his former patients, a boy, was afterwards able to work in a green-grocer's shop and do his work well.

I do not know whether any special method of teaching is possible in very pronounced cases, apart from oral instruction.†

The correct diagnosis of the condition in these cases is often not made till late. In the present patient, as far as I know, the diagnosis was due to the school authorities having recently sent him up to have an examination made of his eyes and vision.

According to Bastian's views on Aphasia ‡ deficiency in children in regard to speech and reading may be classified somewhat as follows:—

(1) Deficiency due to general mental causes and mental dulness and imperfect psychical development.

(2) Defective speech caused by defects in the outer air-passages—nose, pharynx, etc.

(3) Word- and Letter-Blindness, as in the present case, due to defects in "visual memory" of letters and words.

* T. R. Whipham, 'Proc. Roy. Soc. Med.,' 1916, ix (Sect. for the Study of Dis. in Child.), p. 8; and Brit. Journ. Child. Dis., Lond., 1916, xiii, p. 33.

† But see James Hinshelwood, "The Treatment of Word-Blindness, Acquired and Congenital," 'Brit. Med. Journ.,' 1912, ii, p. 1033.

‡ *Cf.* H. C. Bastian, 'Treatise on Aphasia and other Speech Defects,' London, 1898.

(4) Word-Deafness, due to defects in "auditory memory." Some cases of this group seem to be partly due to local aural causes (R. Lake,* W. S. Syme,† Mayo Collier,‡ H. Drinkwater,§ etc.)

(5) Certain cases classed under "idioglossia," etc., which may be due to defective "glosso-kinæsthetic memory." The cortical centres in the brain are not necessarily bilateral, and arrested development on one side may be a cause of imperfect speech.

The terms "word-blindness" and "word-deafness" seem to have been first employed by Kussmaul in 1877, in Ziemssen's 'Cyclopædia of Medicine,' in his long article on "Disturbances of Speech—An Attempt in the Pathology of Speech." Discussing that class of cases (Chapter XXVII), he wrote‖: "This morbid inability we will style, in order to have the shortest possible names at our disposition, *word-deafness* and *word-blindness* (*cæcitas et surditas verbalis*)." In the diagnosis and differentiation of cases of word-blindness much has been done by the writings (1895–1917) of James Hinshelwood¶

* R. Lake, "Deaf-Mutism—An Attempt to Explain the occasional Cure following Removal of Adenoids," 'Treatment,' London, 1899, iii, p. 369.

† W. S. Syme, "A Case of Congenital Word-Deafness," 'Brit. Med. Journ.,' 1904, ii, p. 1229; "Delayed Speech in Children," 'Edinb. Med. Journ.,' New Series, 1907, xxi, pp. 506–512. Syme holds that adenoids may cause "delayed speech" in children, and that their removal by operation may improve speech even when children are twelve or fourteen years old. Syme goes so far as to suggest an explanation for the venerable story narrated by Herodotus, the "father of history," of the son of Crœsus, King of Lydia, who, though from birth he had been unable to speak, suddenly gained the power of speech to beg for his father's life. Syme says there may have been adenoids which atrophied and left an unimpressionable auditory word-centre open to stimulation. The sudden effect of fright may have been to increase the activity of the auditory and motor word-centres.

‡ Mayo Collier, 'Med. Press.,' London, 1902, i, p. 49. The patient was a girl, aged 9 years, whom Collier considered to be an example of acquired deaf-mutism probably due to cerumen. There was rapid recovery of hearing and speech on removal of the wax.

§ Drinkwater at the Liverpool Medical Institution, April the 20th, 1911, demonstrated the case of a girl, aged 14½ years. Until four years previously she had been able to hear normally, but then became deaf as the result of a catarrh, and at the end of six months could not hear spoken words. When Dr. Drinkwater saw her, air-conduction was absent, but some bone-conduction was present. Removal of adenoids and the use of Politzer's bag was followed in two weeks' time by recovery of hearing sufficient to enable her to hear a watch at twelve inches, but she was still word-deaf, and could only repeat a few words, though she could speak, write, and read with comprehension. Re-education of the auditory word-centre was thought by Dr. Drinkwater to be required. (See 'Liverpool Med.-Chir. Journ.,' 1911, xxxi, p. 384.)

‖ Ziemssen's 'Cyclopædia of Medicine,' English edition, London, 1878, xiv, p. 770.

¶ Amongst Hinshelwood's numerous writings on the subject see especially the following: "Word-Blindness and Visual Memory," 'Lancet,' London, 1895, ii, p. 1564; "Congenital Word-Blindness," 'Lancet,' 1900, i, p. 1506; "Four Cases of Congenital

to clear up the subject and make it more widely known. Sydney Stephenson,* writing in 1905, remarks: "Diagnosis offers few difficulties if once the fact be grasped that there is such a thing as a congenital inability to read. Confusion, however, might arise when word-blindness co-existed with considerable error in refraction. Even then the history should safeguard us against error, while the fact that the child experienced exactly the same difficulty in reading large as he did small type would be strongly suggestive of the existence of this curious and interesting congenital defect. It may be added that more than one of the case-histories comment upon the fact that the patient never read for pleasure."

A particularly instructive case is one narrated by Hinshelwood in 1904† of congenital word-blindness in a boy, aged 12 years, who was really in every other respect quick and intelligent. "He had no difficulty with arithmetic, and could keep up with the other scholars easily in this department. He was now working at compound addition. His mother said that the other boys laughed at him in the class, and when he became excited his reading was worse than ever. He concealed his defect for a time by learning his lesson by heart, so that when it came to his turn and he got the few words at the beginning he could repeat the lesson by heart." Hinshelwood advised that no further attempt should be made to make the boy read in class, where his mistakes and difficulties excited ridicule, but that the boy should have frequent short lessons by himself. This plan of treatment resulted in splendid progress being made.

Cases of word-blindness may be contrasted with cases of word-deafness, in which an oral question is answered merely by a senseless echo-like repetition of the question, whereas the same question written down before the patient's eyes elicits the correct answer without any delay.

Some cases of defectiveness in speech and reading in children offer rather difficult problems for solution. I will refer to such a case which I was able to follow for a long time. The patient was a boy, F. S—, born on October the 2nd, 1891. According to the history obtained he was healthy and well-nourished in infancy, and before the age of two years had learned to say "father" and "mother" and ask for bread and butter, etc. At two years of age

Word Blindness occurring in One Family," 'Brit. Med. Journ.,' 1907, ii, p. 1229; 'Letter-, Word-, and Mind-Blindness,' London (H. K. Lewis), 1900; 'Congenital Word-Blindness,' London (H. K. Lewis), 1917.

* S. Stephenson, 'Brit. Journ. Child. Dis.,' 1905, ii, p. 550.

† J. Hinshelwood, 'Brit. Med. Journ.,' 1904, ii, p. 1303.

he suffered from what his mother termed a "sunstroke," during which he was dangerously ill for a week and had to have ice-bags applied to his head. After this illness his general growth was fairly good, but he could not learn to speak, and remained rather thin. I first saw him in January, 1897, when he was 5 years old, and had him admitted to hospital for a short period of observation.* At that time he could not speak at all, but no other defect could be discovered. When he tried to pronounce a word the sounds he uttered were more like those of a wild beast than of a human being. In 1899 he could understand everything said to him and could answer ordinary questions. He was not left-handed, but used his right hand by preference. He could recognise single Arabic numerals and the letters of the alphabet, but could hardly recognise even short words when shown them on paper. He sometimes made mistakes in writing his own Christian name. He could count and add up simple figures on paper. There was a very decided form of dysarthria or "idioglossia" present, and he likewise was a bad stammerer. A good deal of trouble was taken with him. An open-air life was decided on. The boy developed well and ultimately learned to speak quite normally. He became a gardener and afterwards a chauffeur and was successful. He married about 1914.

In connection with the last case one of Dr. S. Gee's "clinical aphorisms" may be called to mind:† "Boys are sometimes very backward in learning to talk; but if a boy cannot talk at 4 years of age, he is—with a single rare exception—either deaf and dumb or an idiot. The former alternative can easily be excluded. The exception mentioned is the condition of congenital aphasia." The above case of F. S— was an exception, but whether the condition was one which can be properly termed "congenital aphasia" may be considered doubtful.

On the whole, the most probable explanation of the case of F. S— appears to be that, corresponding to what the mother called a "sunstroke" at 2 years of age, the boy had a relatively mild attack of sporadic cerebro-spinal meningitis, or else of acute encephalitis (that is to say, polio-myelo-encephalitis, recently termed the "Heine-

* I gave a short note of his condition at that time in the 'St. Bart.'s Hosp. Reps.,' London, 1898, xxxiv, p. 310. For a later account of the case see Weber, 'Proc. Roy. Med. and Chir. Soc. of Lond.,' 1900, 3rd ser., xi, pp. 111–117. Compare this case also with that described by A. Voelcker, "Arrested Development of the Speech Centre," 'Trans. Clin. Soc. Lond.,' 1900, xxxiii, p. 64.

† "Clinical Aphorisms from Dr. Gee's Wards," 'St. Bart.'s Hosp. Reports,' London, 1896, xxxii, p. 57, No. 256.

Medin disease"). In either case his cerebral cortical speech-centres may have been damaged, so as to cause delay in their development, together with the condition of partial aphasia and dysarthria from which the boy for a long time afterwards suffered. His final recovery may have been partly due to a gradual process of compensation and re-education. It should also be mentioned that at the period when the boy stammered dreadfully, he used frequently to move his right arm convulsively, as if trying to "work up" the cortical centres of the left motor region of his brain, before and during the utterance of any words, *i. e.* when he was saying something or trying to say something.

## CASE OF CONGENITAL DEFECT OF THE DUODENUM, IN WHICH BILE WAS FOUND BOTH ABOVE AND BELOW THE ABSENT PORTION.*

By E. A. Cockayne, R.N., D.M., F.R.C.P.

The case occurred in a male child born at full term. There was no history of any similar condition in the family, and the mother was in good health during her pregnancy. At the confinement it was noticed by the medical attendant that the liquor amnii was excessive in quantity and bright green in colour. The child vomited liquid, which resembled the bile-stained liquor amnii, on the second day, and passed meconium of normal appearance. Slight jaundice was noticed on the third day. Vomiting continued at intervals, the vomit being invariably watery and green, but no more meconium was passed. The general condition became gradually worse until death took place on the fifth day.

At the autopsy it was seen that the child was well nourished and without any external malformation. The skin was slightly icteric. On opening the abdomen the stomach was found to be greatly dilated and the first part of the duodenum to end blindly, being greatly distended and globular in outline. The pylorus was visible and palpable as a thickened constriction between these two organs. Some fluid stained with bile was present in the stomach and distended first part of the duodenum. The bile-duct opened directly into the narrow commencement of the lower part of the duodenum, but the pancreatic duct entered the posterior aspect of the blind sac formed by the upper part of the duodenum. The jejunum, ileum,

* The specimen was shown at the Section for the Study of Disease in Children of the Royal Society of Medicine, on April the 27th, 1917.

and large intestine were of normal calibre; the cæcum and appendix lay just below the duodenum, and the ascending colon possessed a long mesocolon. There was no connection except by peritoneum between the upper and lower portions of the duodenum; the missing part of the viscus was not even represented by a thin cord. The liver, gall-bladder, cystic duct, hepatic duct, and common bile-duct were normal, and the gall-bladder contained a considerable amount of bile. Meconium of the usual dark green colour was present in the jejunum, ileum, and colon, the largest quantity being in the colon. A very careful search was made for a second bile-duct, or for a branch running from the common duct or hepatic duct to the upper portion of the duodenum, but none was present. The interval between the portions of the duodenum was occupied by a part of the head of the pancreas. The blood-vessels to the stomach, duodenum, pancreas, and neighbouring organs were large and showed no abnormality. Histologically, the structure of the duodenum near the entry of the bile-duct appeared normal, and numerous Brunner's glands were present.

The most interesting feature of the case and one which made a correct diagnosis almost impossible, was the fact that a large quantity of bile-stained fluid was vomited, although the bile-duct opened into the lower part of the duodenum, and there was complete lack of continuity between it and the upper part.

The earliest case in which bile was found both above and below a duodenal occlusion was described by Hirschsprung, who proved the presence of bile pigment in the stomach. He regarded the case as incomprehensible. Later cases were described by Wilks, Hobson, Wyss, Ferber, Northrup, Anderson, Cordes, and Spriggs (Case No. 2).

Cordes proved conclusively that in her case the common bile-duct sent a small branch to the dilated duodenum above the occlusion, whilst the main branch opened into the part below the occlusion. In her paper she gives good reasons for believing that a similar condition was present in some of the other cases, in which the same phenomenon was noticed, and even in some in which it was not, such as the two described by Theremin. Dohrn's case also suggested an anomaly of the bile-duct, and in Serr's case two ducts opened into the stenosed portion of the duodenum.

One may reject the view of Wilks and others, that the green fluid vomited is a secretion of the stomach.

The only reasonable alternative to Cordes' explanation of the way in which bile can be vomited and passed in the meconium with a

complete atresia of the duodenum, is that advanced by Spriggs in his important paper in the 'Guy's Hospital Reports.' He suggests that where the bile-duct opens below the occlusion the presence of bile above it may be due to the infant having swallowed amniotic fluid containing meconium previously passed *in utero*, but regards it as unlikely. It is indeed unlikely to have been the cause in those cases in which a branched bile-duct existed, and in none of the cases reported was this possibility entirely excluded. In Anderson's case it was specially noted that the amniotic fluid was colourless.

In my case there can be no doubt that the second alternative was the correct one. The presence of a second or branching bile-duct was carefully look for, but none was found, whereas, there was an excess of green liquor amnii, the colour of which was doubtless due to the presence of meconium.

With regard to the ætiology of the condition I will say little. The causes of atresia and stenosis of the intestine have been dealt with very ably by Cordes, Spriggs, and Henneguier, all of whom have agreed that they are numerous. Atresias of the duodenum, however, stand apart, and almost always occur close to the opening of the common bile-duct, either just above or just below it. They may be attributed, with considerable assurance, to an error of development connected with the growth of the liver and pancreas. This is not made improbable by the fact that the liver and pancreas are generally developed normally in these cases, because once their outgrowth has taken place they are little likely to participate in an anomalous growth of the duodenum from which they sprang.

In my case some of the causes which have been proved to produce atresias of the jejunum and ileum, and occasionally of the duodenum, can be excluded. No failure of development of the arteries was present, such as has been described by Jaboulay, nor endarteritis obliterans, such as Durante discovered, nor embolus nor thrombosis, such as Kühner found. There was no fœtal peritonitis. Fiedler thinks that such a peritonitis, probably syphilitic in origin, may occur early in fœtal life, and leave no trace behind except an intestinal atresia or stenosis, and Schottelius has suggested that syphilis is a frequent cause, basing his contention on the fact that so many of the cases are met with in premature infants. The absence of any family history pointing to maternal syphilis, and the negative Wassermann reaction in the mother's blood, makes it very unlikely that hereditary syphilis had any direct or indirect effect in producing the defect of the duodenum in my case.

In favour of the view that intestinal, and especially duodenal occlu-

sion is due in many instances to an error of development, is the fact that other malformations commonly regarded as defects of development are sometimes associated with it. The commonest of these is imperforate anus, which, according to Spriggs, is associated with it in one case in twenty. Another is described by Veszprémi, who met with a patent septum ventriculorum in the heart, and a duodenal occlusion in the same infant.

Congenital occlusion of the duodenum is in itself a rare condition. Cowell, in 1912, was able to collect only ninety-two cases, a few have been described since. The rarity of the occurrence of bile above and below the stenosed piece of gut, a condition generally dependent on a branched bile-duct, has been discussed already. Still more infrequent is an arrangement of the pancreatic and common bile-ducts, by which one enters the duodenum above the occlusion and the other below. The only case which I have been able to discover comparable to mine is that of Hess. In this there was a duodenal occlusion and an imperforate anus, and the pancreatic duct opened into the duodenum below the constriction, the common bile-duct above, a condition the reverse of that met with in mine.

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# NOTES ON A FATAL CASE OF PELVIC CELLULITIS IN A CHILD.

By Frederick C. Pybus, M.S., F.R.C.S.,

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A peculiarity of children as compared with adults is the rarity of streptococcal infections of the cellular tissues in the former. Prof. Rutherford Morison's aphorism that cellulitis does not occur in children is a most useful one. While of course not strictly true it is helpful, and were it more generally known and appreciated, cases of osteitis would often be recognised as such and receive proper and efficient treatment instead of being mistaken for cellulitis. In this patient the pelvic cellular tissue was involved, and in its regional spread the cellulitis presented many features resembling that due to puerperal infection.

D. S—, a female child, aged 7 months, vomited several times and was apparently ill. A few days later the mother noticed the right labium majus was red and swollen, and the temperature was found to be 103° F.

On February the 3rd, 1915, I found the child pale and obviously ill. The bowels had moved normally. The right labium majus was red and œdematous. There was no discharge about the vulva or enlargement of the groin glands. The abdomen was somewhat distended and was tender in the lower half, especially on the right side, and an indefinite mass could be palpated in the right iliac fossa.

An examination per rectum revealed a mass on the right side of the pelvis near the brim. The diagnosis seemed doubtful between an appendix abscess with infection of the retro-peritoneal cellular tissue or cellulitis of the labium with involvement of the iliac glands. I inclined to the latter opinion and had the child removed to hospital for operation.

*Operation.*—February the 3rd, 1915: Under the anæsthetic a definite mass could be felt behind Poupart's ligament and in the lower part of the right iliac fossa. The abdomen was opened in the right iliac fossa. The peritoneum and cellular tissue were œdematous. On opening the peritoneum clear fluid escaped. The appendix was normal, but the outer half of the Fallopian tube where it rested against the inflamed peritoneum was œdematous. A small tube was inserted down to the Fallopian tube and the peritoneum closed. On

pushing aside the peritoneum from the iliac fossa a collection of pus was reached lying on the psoas muscle and apparently arising from an infection of the iliac glands. The pus was mopped out and a small tube inserted into the abscess cavity.

The remainder of the wound was then closed. A culture of the pus gave a profuse growth of streptococcus.

*Subsequent history.*—The child was discharged from hospital at the parent's request on February the 17th, 1915, with a sinus still present at the wound. Two or three weeks later the child was again admitted, and the wound was re-opened by my assistant. A tube was inserted, which was followed later by the formation of a fæcal fistula. At a later date abscesses appeared in the left groin, above Poupart's ligament and in the left ischio-rectal fossa; these were opened and drained. Still later, abscesses formed and discharged from the right ischio-rectal fossa and from Petit's triangle above the left iliac crest.

I again saw the child in this condition in September, 1915. There was pocketing of pus at each of these places; the skin was undermined, but in spite of this the child remained in fairly good condition. It was obvious that the whole pelvic cellular tissue was infected, and on rectal examination there was considerable thickening in the pelvis closely resembling that found on vaginal examination in diffuse puerperal pelvic cellulitis.

A further operation was performed in October, 1915. The sinuses were explored and undermined areas laid open. All the sinuses communicated in the pelvis, and the finger could be passed from side to side or from the groin into the ischio-rectal fossa.

The child died a week later, but no further examination was permitted.

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## ACUTE DELIRIUM IN LOBAR PNEUMONIA IN A CHILD.

By J. Porter Parkinson, M.D.,

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In the last number of this Journal Dr. Hugh T. Ashby recorded a case of acute violent delirium occurring during the crisis of an otherwise normal case of acute pneumonia. Last month I had a very similar case, and as the condition is certainly rare a description of it may be of interest.

A girl, aged 7 years, was admitted to hospital on the second day of her illness, which began with fever and vomiting. There were signs of

consolidation of the upper lobe of the right lung. The temperature ran high, mounting to 105° F. or over daily but with daily remissions to 103, or even 101° F. It fell by crisis on the eighth day. On admission she was restless and irritable when touched, slept very badly, waking with a start as if frightened, but became quiet on being sponged.

On the seventh day of the illness she became delirious, and towards night wildly excited, screaming and trying to get out of bed, necessitating the constant presence of two nurses to prevent her getting up.

She got a very bad colour and the pulse became very feeble, but not more rapid than usual being 144 to the minute, and the breathing very shallow, 50 to the minute.

There were no signs of meningitis, pericarditis, or other complication.

After a dose of nepenthe she became somewhat quieter and slept a little, but during the night had several severe attacks of screaming.

On the following day, though the temperature was beginning to fall, she continued very delirious and violent and this lasted till the temperature had been normal for two days.

She made a perfectly good recovery, the signs of consolidation disappearing in the usual way.

The cerebro-spinal fluid was not examined as she would have been an extremely difficult case for lumbar puncture.

Cerebral symptoms such as convulsions, delirium, etc., at the onset of acute pneumonia are, of course, very common, but when they occur at the end of a week they generally are due to some complication and most of the cases end fatally. In my case the only cause for the delirium would appear to be the height of the fever, but this is not infrequent while a violent delirium of the type described is certainly rare.

There was no history of any nervous disease in the patient or her family.

## Royal Society of Medicine.

### SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

*Friday, March the 23rd*, 1917.

Dr. L. Guthrie, *ex-President, in the Chair.*

**Amyotonia Congenita.**—Dr. H. C. Cameron showed a female infant aged 2 years. The family history was without bearing on the case. The child

was breast-fed till aged 12 months. Teeth were cut without disturbance at the age of 8 months. There had never been any digestive disturbance and the child though small was fairly well nourished. She had been under observation for nine months. Lately there had been very rapid improvement, and crawling was now accomplished comparatively easily. The muscles of the upper extremities especially had recently gained considerably in tone. She was being treated with massage and exercises. Skiagrams showed slender bones, not otherwise abnormal. There was no signs of rickets. The stools were pale in colour and of a glistening appearance, due to the presence of fatty acid crystals and soaps. Stercobilin was present.

**Splenic Enlargement.**—Dr. E. Cautley showed a boy, aged 5 years 2 months; twelfth child. Four of the children were dead and the mother was reported to have died of carcinoma mammæ. He was brought up on milk and water. He was a very small and anæmic child, 18 lb. 12 oz. in weight, and markedly rachitic, with a large lax abdomen and kyphotic lumbar curve, and was unable to walk or crawl. The spleen was enormous and hard, extending down to the pubes and a good inch beyond the middle line below the level of the umbilicus. The liver extended about 4 in. below the costal margin. Blood: Hæmoglobin, 25 to 30 per cent.; erythrocytes, 1,460,000, and leucocytes, 5600 per cubic millimetre. Differential count: Polymorphonuclears, 49; large lymphocytes, 23; small lymphocytes, 20; hyaline mononuclears, 3; transitionals, 3; mass cells, 1; neutrophile myelocytes, 1 per cent. Poikilocytosis present. Marked polychromatosis rendered it difficult to distinguish between nucleated red cells and small lymphocytes. Two normoblasts and a megaloblast were seen while counting 100 cells (H. H. Sanguinetti).

(?) **Juvenile Tabetic Bilateral Optic Nerve Atrophy.**—Dr. F. Parkes Weber.—The patient, aged 7 years was a bright intelligent boy, born in London of Hebrew parents. In December, 1916, it was found that his sight was failing and this had progressed, until now he could only see enough to be able to count fingers in a good light. There was horizontal nystagmus. Both pupils were moderately dilated (the right one somewhat more than the left), and neither of them reacted to light nor accommodation. Ophthalmoscopic examination showed nearly complete optic nerve atrophy in both eyes; the arteries were only moderately contracted. Röntgen-ray examination furnished no evidence of anything abnormal at the base of the skull. There was no obvious hydrocephalus or cranial deformity, nor were there signs of disease elsewhere in the body. Excepting a doubtful history of injury to the head, there was nothing in the past history of the patient which threw light on the case. But his blood-serum gave a positive Wassermann reaction, and so did that of his mother and that of one of his sisters; whilst another of his sisters had been treated at another hospital, apparently for congenital syphilis. The patient's mother had had five children and two miscarriages. The five children were all living; two of them, besides the patient himself had been already mentioned; the other two were said to be healthy.

**Cerebral Degeneration and Epileptiform Fits, with Amaurosis, in an Only Child. Question of Juvenile Paralysis.**—Dr. F. Parkes Weber (*vide* p. 176).

**A Rare Disease in Two Brothers.**—Major Charles Hunter.—The

brothers were aged 10 and 8 years respectively. Father living, aged 48 years, strong and healthy, and of normal appearance. Mother died at 45 of kidney disease, when five months pregnant. The boys are the only living children. There was first a miscarriage, then full-term twins, who died at birth, the confinement being difficult and instrumental, then a miscarriage, and lastly death of the mother when pregnant five months.

The two children were full-term and were delivered without instruments, were both breast-fed and had no digestive disturbance in infancy, and both walked at the age of seventeen months. The elder began to talk when aged about 1 year. The younger was late in learning to talk and is still somewhat backward. Both children have been healthy in every way apart from enlarged tonsils and adenoids for which they have been operated. Both have inguinal hernia; the younger was able to dispense with his truss three years ago, the elder still has to wear one.

*Present condition.*—The children present an extraordinary appearance, and apart from their difference in size and some minor points are exactly alike. They are undersized, 3 ft. 11 in., and 3 ft. 9 in. (average 4 ft. 4 in. and 4 ft.), weight 56 lb. and 50 lb. (average 66½ lb. and 54½ lb.), heads extremely large, measuring in greatest circumference 23 in. and 22 in. (average 21 in. and 20½ in.). The head is curiously shaped with very marked bulging of the squamous portion of the temporal bone and of the frontal bones; the hair of the head rather thin and very harsh especially in the younger. The face is very large, of deep burnt-red colour, with a tinge of cyanosis in cheeks and lips, eyes very puffy, saddle nose, with large thick nostrils; thick lips, slightly open mouth, very large tongue, teeth good, but with irregular furrows and slightly spaced, very short neck with slight enlargement of thyroid in both. The chest is broad, abdomen very large and deep, greatly protruding with small umbilical hernia, penis rather large, testes normal size. From behind the scapulæ are seen to be placed extremely high, closely resembling a double Sprengel's deformity; the neck is very short. The spinal column is straight, the natural curves being obliterated; the thighs are slightly bent, and the whole trunk inclines slightly forward. The arms are held somewhat adducted from the body and bent at the elbows so that the hands rest on the front of the thighs instead of on the side. The upper arm is disproportionately short in relation to the forearm, which is abnormally flat. The wrists are very thick, the hands very broad, short and thick; the fingers very short and bent. The knees are slightly flexed, both knees and ankles are thick, and the feet are broad, short and thick. The gait is very clumsy and stiff, the trunk is slightly bent forward and is held rigid. The normal movement is curtailed in all the joints of the extremities. The hands, particularly of the elder brother, have entirely lost their supple freedom of movement; they cannot be clenched; extreme extension of the fingers is similarly deficient, and even the movements possible are clumsy and stiff. The elbow and shoulder share in the general limitation of movement. Active and passive movements of the spine are very much limited. The hip- and knee-joints have lost a little of their range of movement. The toes, while not deformed like the fingers, have completely lost the suppleness characteristic of youth. The skin of the trunk is smooth and not specially dry. The backs of the hands and fingers are deeply bronzed and the skin is there very thick and rough. In the younger child, over strips of skin 1½ in. wide extending from the angles of the scapulæ parallel to the ribs forward to the mid-axillary line, there are pin-head elevations, grouped closely and regularly, smooth of surface, normal in colour, and not unlike, though more

superficial than the lesions of cheiropompholyx. Some sixteen similar markings occur over an area of the size of 50 cents, in the upper part of the right arm. No pubic nor axillary hair. The breathing is audible even at rest and becomes loud and puffing on exertion. The heart in the younger is normal; in the elder it is enlarged to the left, there is a distinct diastolic murmur audible in the third and fourth left interspace close to the sternum, the second sound at the pulmonic and aortic areas being clear; at the apex, a systolic murmur is conducted slightly towards the axilla.

Blood count in the elder: Hæmoglobin, 80 per cent., red cells 6,000,000, white cells 7000. The liver and spleen are very much enlarged in both. The urine is normal. The children are bright and intelligent, though both are hampered by distinct dulness of hearing. General examination of the nervous system was negative. Wassermann reaction negative in both children and in the father.

Both have some adenoids. There are no signs of syphilitic disease about the nose and throat.

Skiagrams show abnormal thickness of all the bones and pronounced irregular epiphyseal ossification.

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*Friday, April the 27th,* 1917.

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**Lipodystrophia Progressiva in a Male.**—Dr. F. Parkes Weber (*vide* p. 179).

**Bilateral Optic Nerve Atrophy in a Child, with Positive Wassermann Reaction and History of Infantile Convulsions.**—Dr. F. Parkes Weber.—The patient, a girl, aged 3½ years, was prematurely born (at seven months), but appeared physically and mentally fairly normal, excepting that she was blind and presented incomplete bilateral optic nerve atrophy. The mother was not sure that the child could ever see more than enough to distinguish light from darkness. There was a strong history of infantile convulsions up to the age of 1 year and 2 months. She commenced to suffer from fits when she was aged 2 months, the first one lasting about fifteen minutes. They recurred frequently for three days, and then they ceased until she was aged 6 months. From that time they appeared in the form of frequent attacks of "jerky movements" (six to eight attacks daily) until she was aged 14 months, when they ceased. The child's blood-serum and that of her mother gave a positive Wassermann reaction. The mother had one other child, a boy, aged 9 years, who was living and seemed to be healthy, and whose blood-serum gave a negative Wassermann reaction. She had had one miscarriage (at three months), about 6½ years ago. The child's father, who gave a weakly positive Wassermann reaction, denied ever having had any venereal disease. A younger brother of the father was said to have had a blind, prematurely born child, who lived only fifteen months.

**Congenital Word- and Letter-Blindness—Congenital Alexia, with Agraphia, without Aphasia.**—Dr. F. Parkes Weber (*vide* p. 183).

**Case of Syphilitic Periostitis and Epiphysitis in One of Twins, without other Marked Signs of Syphilis.**—Dr. H. C. Cameron showed an infant, aged 9 weeks. Breast-fed. Soon after birth the thighs became swollen and tender. Thickening of both femora and tibiæ could be felt. The left leg was held motionless. Other signs of syphilis were not marked.

There was a slight snuffling sound on breathing. A positive Wassermann reaction was obtained in the mother and both children.

The following were also shown:

(*a*) The twin unaffected.

(*b*) A radiogram of the bones around the affected knee-joints, showing thickening of the periosteal bone and a large bony mass projecting from the femur behind the knee. There was also a well-marked shadow, showing the zone of ossifying fibrous tissue, running along the epiphyseal line and separating epiphysis from diaphysis. In the case of the left femur, separation of the epiphysis had taken place at this point. X-ray examination of the other child showed nothing abnormal.

(*c*) A specimen from a child 10 weeks old from an autopsy, showing exactly similar changes—viz. the dense, yellow periosteal bone, the ossified, outlying mass in the same situation behind the knee, and the yellow line of ossifying tissue separating epiphysis from diaphysis in both femur and tibia.

(*d*) A radiogram from this specimen for purposes of comparison.

**The Case of Osteogenesis Imperfecta shown in 1916, at a very Early Stage.**—Dr. H. C. Cameron.—The peculiar bulging of the temporal part of the skull, described in 1916 (*vide* British Journal of Children's Diseases, 1916, xiii, *p.* 241), had now become bilateral. The femur had since been twice fractured. There had thus been in all five occasions on which fracture had occurred from very slight violence. One fracture had occurred at birth, and the others had taken place since.

**Case of Congenital Defect of the Duodenum in which Bile was found both Above and Below the Absent Portion.**—Dr. E. A. Cockayne (*vide* p. 188).

**Status Lymphaticus from the Clinical Standpoint.**—Dr. H. C. Cameron read a paper which he summarised as follows:

1. The lymphoid over-growth so commonly found post-mortem in children is no more than an enlargement from the irritation of chronic catarrh in the corresponding mucous membranes.

2. Such children during life show evidence of faulty nutrition on infection of all epithelial structures, hair, skin, teeth, conjunctiva, and the mucous membranes of respiratory and intestinal tracts.

3. There is usually present a characteristic wateriness of the tissues, which is dependent to some extent upon excessive carbohydrate feeding, which is a main cause of the liability to infection.

4. Local treatment of the catarrhs alone is likely to be inefficacious, and must be accompanied by a systematic attempt to bring about the process of dehydration and improve the nutrition of the tissues.

5. The status catarrhalis is a predisposing cause of rheumatism and tubercle, and carries with it a liability to sudden death at the onset of virulent infections, such as pneumococcal infections, measles, or diphtheria.

## SECTION OF ELECTRO-THERAPEUTICS.

*December the 15th*, 1916.

**The Changes Observed in Cases of Osteomyelitis.**—Dr. R. W. A. Salmond described three essentially different cases of osteomyelitis in a long

bone, observed by repeated X-ray examinations and with their main clinical facts.

Case 1.—*Infective osteomyelitis of right radius of staphylococcic origin.*—Girl, aged 9 years.

The chief points of interest in the case were the following:

(1) Observations were begun within 24 hours of the definite exciting factor.

(2) The clinical crisis taking place before hardly any radiographic changes were to be seen.

(3) The escape of the upper epiphysis, adjacent joints, and except for an occasional slight periostitis, the ulna.

(4) The formation of a complete new shaft in three months, the old shaft meantime having been absorbed, detached as sequestra or removed at operation.

(5) The occurrence of two relapses, one not causing any symptoms and discovered quite unexpectedly, the other occurring, some two years later at the same position and much more acute in nature.

(6) The non-obliteration of one of the abscess cavities in the bone for three years, probably due to the remains of some focus of disease, as the subsequent extrusion of a sequestrum or pus, or both, led to its disappearance.

Case 2.—*Syphilitic osteomyelitis of right radius.*—Girl, aged 13 years. Under treatment with mercury and iodide the bone showed little improvement radiographically until after about two months, when the condition gradually returned to the normal. As in the previous case the adjacent joints were not involved and clinical improvement took place long before the radiographic.

Case 3.—*Tuberculous osteomyelitis of lower end of left femur.*—Boy, aged 10 years. The case showed the following clearly defined differences from the other two cases; (*a*) The ready spread of the disease to the adjacent joint, the epiphyseal and articular cartilage being no barrier, while in Case 1 the epiphyseal cartilage at one end and the articular cartilage at the other strictly defined its limits; (*b*) the extensive infiltration of the surrounding soft parts.

## SECTION OF OBSTETRICS AND GYNÆCOLOGY.

*March the 1st*, 1917.

**Metastatic Glioma (Neuro-epithelioma) of the Right Ovary in a Child, aged 3 years.**—Dr. Cuthbert Lockyer.—A girl, aged 3 years, was admitted to hospital on February the 14th, for a fungating growth protruding between the lids of the left eye. The right eye was proptosed. The left orbit was exenterated, and the right eye freely excised within an hour of admission. On March the 11th the child was discharged, and on the 30th was re-admitted with a recurrence the size of half a tennis-ball protruding from the right socket. This was cleared out on the day of admission, but the patient soon became very emaciated, the right socket filled up again, and death occurred on May the 7th.

At the autopsy about twenty rounded growths with raised edges, scarlet in colour, caused adhesion of the dura mater to the bones of the cranium; there was also a mass of growth in the position of the optic chiasma. Metastases were found in the mesenteric glands, on the anterior aspect of the

body of the second lumbar vertebra, and in the right ovary. The pelvic organs were otherwise quite normal. On naked eye section of the right ovary the centre was found occupied by a blood-clot measuring $\frac{5}{16}$ in. in diameter. The clot was surrounded by an area of new tissue, forming a zone $\frac{3}{16}$ in. in thickness. Microscopical sections showed a normal ovarian cortex containing many primordial follicles, deep to which came the tissue of the new growth, the characters of which were indistinguishable from those of a small, round-celled sarcoma.

Dr. Lockyer had found only two other cases of metastatic glioma of the ovary on record:

1. (Heymann and Fiedler, '*Arch. f. Ophthal.*,' 1869, xv, *p.* 173.) The patient was a child, aged 3 years. The primary disease was unilateral, affecting only the left eye. The tumour was the size of a hen's egg. Four months after the onset of the disease the bulb was extirpated and the optic nerve resected. Recurrence followed two weeks later, and death occurred two months after operation. Metastases were situated on the cranium and meninges, underneath the optic chiasma, in the left ovary, and in the retroperitoneal glands. The age of the patient and the distribution of the metastases were thus practically identical with those in the present case.

2. (Rosconi and Bizzozero, '*Riv. Clin. di Bologna*,' 1871, *p.* 169.) Child, aged $1\frac{1}{2}$ years, who died two months after the growth was first noticed. No operation was performed. There was exophthalmos, due to a *glioma retinæ*. Metastases were found between the cranial bones and the dura mater, in the liver, and in both ovaries.

## Philadelphia Pediatric Society.

March the 13th, 1917. The President, Dr. John F. Sinclair, in the Chair.

**Congenital Equino-varus.**—Dr. William J. Taylor showed a six weeks old baby with a congenital equino-varus of the right foot, and demonstrated a method of stretching and moulding the foot into shape which he has found to be very successful in young infants.

This treatment should be begun within a few days after birth, and the nurse should carry this out three or four times a day, being very careful not to irritate the skin and to produce no real pain. Within a week the foot and leg should be held firmly in a small tin splint by means of flannel bandages, and later, plaster-of-Paris casts should be used. These latter should be removed frequently—certainly once a week—and an effort made at each reapplication of the plaster-of-Paris to straighten the foot. The bones of the foot, in these young infants, were so soft and easily moulded that astonishingly good results could be obtained by this method of treatment without any form of cutting operation.

**Chorea.**—Dr. Arthur H. Gerhard said that chorea was the commonest of all nervous diseases of children. M. J. Lewis's report of clinical studies of many hundreds of cases, in which he called attention to the seasonal distribution, showed a distinct increase in March and April, and again in the early autumn.

Dr. Gerhard called attention to the close inter-relation of chorea, ton-

sillitis, and rheumatism, and Von Pirquet's expression of belief that they were manifestations of the same infection. Atypical rheumatism of children should be considered.

An important clinical point was the rarity of chorea in the well-to-do, and the inference was that this must be due to prompt attention to tonsils, eyes, rheumatic pains, etc.

The less commonly known concomitants of chorea were palsies, affection of speech and habit tics succeeding true chorea.

The commonly concomitant anæmia, and the prevalence of hæmic murmurs in first attacks, followed by true endocardial murmurs in the typical recurrences of the disease, were mentioned.

Dr. Gerhard spoke of the value of aspirin in the treatment, followed by iron and arsenic during convalescence, and of the necessity of regular rest, of keeping choreics away from "movies," and of depriving the patients of tea, coffee, and sweets between meals.

The care of tonsils, eyes, teeth, circumcision, etc., in the disease was most important. The mild choreic movements and apical murmurs, with the circulation maintained, were not considered contra-indications to anæsthesia and surgical procedure.

Finally, a query was made as to possible prevention of this very common disease by urging proper care of children with sore throats, eye-strain, rheumatic pains, etc.

**Progressive Muscular Dystrophy.**—Dr. Williams B. Cadwalader.—The patient was a girl, aged 16 years. The family history suggested that some abnormal congenital influences as well as those producing myopathy were present, for her brothers and sisters showed defects of development but did not have myopathy. The patient's condition developed at the age of 4. She complained at that time of general muscular weakness. She stated that she had recovered almost entirely, but when 12 years old she was again seen by Dr. Cadwalader because the muscular weakness was returning. Since then her condition had not altered appreciably. Examination showed that the face was not affected, but there was marked atrophy of the muscles of the proximal portion of both arms and of the shoulder-girdles. The left biceps was hypertrophied; the muscles of both forearms were slightly hypertrophied, as were also the calf muscles. The tendon reflexes were diminished. Some of the muscles in the scapula regions showed fibrillary tremors. Dr. Cadwalader stated that fibrillary tremors were apt to be regarded as indicative of a lesion of the anterior horn-cells. This, however, was not entirely justified, for it was known that fibrillary tremors occasionally occurred in cases of pure primary myopathy.

Progressive muscular dystrophy might be a familial disease. It was a congenital but not necessarily an hereditary condition. In many instances no antecedent cases could be traced in the patient's family. Moreover, it had been shown, according to Gowers, that children of the same mother by different husbands suffered the same way. It generally made its appearance after some acute infection. A sudden or acute onset had been recognised, but it was doubtful whether it was not merely an acute exacerbation of a latent condition. Its course was usually gradual and progressive. In rare cases dystrophy had been known to become arrested; indeed, this patient's condition did not seem to have become worse in the past four or five years. Recovery had been reported a very few times, but there was still some doubt as to the accuracy of such observations.

Progressive muscular dystrophy was essentially a disease of the muscles. It was an interstitial myositis. The cells in the spinal cord were occasionally affected, but not in the majority of cases.

Four years ago Dr. Corson White and Dr. Cadwalader ('Medical Record,' June the 7th, 1913) had studied a number of patients afflicted with this malady in order to determine the frequency of the occurrence of syphilis. They had found that syphilis was common in the parents and brothers and sisters of myopathic patients, and that myopathy and syphilis were frequently associated. The relation of syphilis to progressive muscular dystrophy was not certain, but the frequency of syphilis would seem to be more than mere coincidence. However, this subject needed further investigation.

The relation of myopathy to disorders of the internal secretions had been carefully studied by Dr. McCouch and Dr. Ludlum ('Medical Record,' June the 10th, 1916). They found the two conditions very frequently associated, and were inclined to believe that they were related.

In the January number, 1917, of the 'Archives of Internal Medicine,' Dr. Timmie, of New York, had published an article, in which he called attention to the fact that in a number of cases of myopathy he was able to recognise by X-ray examination what appeared to be calcification of the pineal gland. He discussed the relation of the disturbances of the ductless glands to myopathy, and concluded that a disturbance of the pineal gland was probably an essential factor in the origin of this disease.

Dr. Cadwalader thought we should hesitate in accepting Dr. Timmie's conclusions, for it was known that the pineal gland in normal individuals was frequently calcified.

Krabbe ("On the Histology of the Pineal Body," 'Rev. Neurol. and Psych.,' June, 1915, p. 300) stated that pineal concretions might occur at any age, and were constant after about the seventeenth year.

**Hysteria.**—Dr. Wm. Drayton said that while hysteria at puberty and during adolescence was common, it was uncommon in younger children. Some of the milder hysterical manifestations were not uncommon, but lasting hysterical stigmata were rare. Dr. Drayton reported four cases, age respectively 7, 10, 11, and 12. In two of these cases there was complete blindness, and in another there was inability to open the eyes. These four cases had been cured by such methods as rest and attention to hygiene, isolation from family, and suggestion by proving to the patient that he was not blind but could read with his supposed blind eye.

**Cerebral Spastic Paralysis.**—Dr. Astley P. C. Ashhurst demonstrated two patients with cerebral spastic paralysis, and five patients with birth injuries of the shoulder. In the cases of birth injury to the shoulder, some held that the posterior dislocation often present was produced by injury at birth, and others that the dislocation was the result of paralysis due to nerve injury at birth. At any rate, remarkable improvement sometimes followed reduction of dislocation. Before 3 years of age this could be done by the bloodless method, but after this age open operation was preferable.

**Orthopædic Treatment of Infantile Paralysis.**—Dr. G. G. Davis.—The ordinary problems of such cases were taken up in detail and demonstrated on a patient. Dr. Davis said that radical operations should not be done before two to five years after the onset of paralysis—in other words,

not before we were sure that there would not be continued return of power. Dr. Davis had not found difficulty in getting ankylosis in these joints in children, although this was contrary to the usual idea that ankylosis was not satisfactory before the epiphysis was ossified. Dr. Davis never caused ankylosis in the hip or knee, although he had found ankylosis of the foot a most useful procedure.

# Abstracts from Current Literature.

## Diseases of the Alimentary Canal.

**How to save the teeth of the children** (*'Journ. State Med.,'* 1916, xxiv, *p.* 268).—**J. H. Gibbs** advocates the line of preventive treatment first put forward by Sim Wallace, some twelve years ago, and shows that the prevention of dental caries consists in omissions from the ordinary diet rather than in additions to it. Dental caries could be almost completely abolished simply by discarding a few pure luxuries in the shape of sweets, and by so arranging our meals that none of them shall end with soft, sticky, sugary food. J. Allan.

**Child welfare and the prevention of dental caries** (*'Edin. Med. Journ.,'* 1917, i, *p.* 433).—**J. H. Gibbs** shows that dental caries and pyorrhœa alveolaris are primarily dependent on diet, and he discusses the dietetic *régime* that should be enforced. The prevention of dental caries consists in omission from the ordinary diet rather than in addition to it. Dental caries undoubtedly causes more acute suffering and misery to the community in the course of every year than any other disease, while the disfigurement that it causes is only too obvious. In loss of work it costs this country many millions of pounds annually, and yet it could be almost completely abolished simply by discarding a few recently introduced luxuries in the shape of sweets, and by so arranging our meals that none of them shall end with soft, sticky, sugary food. J. Allan.

**A case of violent screaming and photophobia caused by dentition** (*'Edin. Med. Journ.,'* 1917, i, *p.* 203).—**John Thomson** reports the case of a breast-fed, but slightly rickety baby, who, between the ages of 9½ and 20 months, suffered from severe nervous symptoms, which seemed always associated with the cutting of teeth. The first attack began when the lower central incisors were appearing (æt. 9½ months), and continued, with only slight intermissions, for 11 weeks, by the end of which time the ten teeth had appeared. The attack then ceased quite suddenly. Its main features were pronounced photophobia and loud screaming; the child also vomited once. The screaming attacks were best controlled by laudanum, and for six weeks he had from 10–20 drops, and after that for about four weeks as much as 18½ drops, every night at bedtime. This effectually quieted him, but did not make him sleep much. When the screaming fits ceased, the laudanum was discontinued without any difficulty. Subsequent attacks of similar nature were noted, and all the attacks occurred when a set of teeth was in process of appearing through the gums. The important point in the treatment was the excellent result of the very large doses of laudanum which

were given and the absence of bad results from them, or of any difficulty in stopping the drug. J. Allan.

**Sialolithiasis and sialodochitis in childhood** (*'Amer. Journ. Dis. Child.,'* 1916, xi, *p.* 232).—**H. Neuhof** records three cases of sialolithiasis or salivary calculus, two of which were instances of solitary calculus in Wharton's duct, and the third one of multiple calculi in Stenson's duct in children, aged 5, 8, and 6½ years respectively. He holds that sialolithiasis is not exceedingly rare in childhood, and that its surgical treatment is simple and efficacious. He also records two cases of sialodochitis of Stenson's duct in children aged 4 and 8 years old respectively characterised by a cicatricial stenosis of one Stenson's duct, the result of an inflammation of unknown origin, by a firm nodular enlargement of the corresponding parotid and by a tendency to recur after slitting the mouth of the duct, but cured by excision of the diseased end of the duct.

J. D. Rolleston.

**Vomiting in infancy** (*'Med. Press,'* 1916, ii, *p.* 584).—**J. Epstein** points out that vomiting in infancy may be the result of: (1) Improper feeding; (2) improper food; (3) congenital pyloric stenosis; (4) rumination; and discusses the symptoms, diagnosis, and treatment in each case.

J. Allan.

**Early morning toxic vomiting in children** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 654).—**T. S. Southwark.**—The vomiting of children, which not infrequently occurs in the early morning either before or soon after the first feed, is often of toxic origin, as shown by the fact that the vomit contains no food residue if before the first morning feed, and, if after this feed, only the food of that meal. It is thus distinguished from the vomiting of undigested and fermenting food due to failure of gastric digestion. It may be assumed that in the toxic type of vomiting the disturbance of digestion is primarily intestinal, not gastric, and that there is an attempted elimination by the gastric mucosa of absorbed toxic principles, which accumulate in the stomach during sleep and assert their presence on awakening in nausea and vomiting. Southwark reports a case in a boy, aged 3 years, cured by calomel, followed by citrate of magnesia.

J. D. Rolleston.

**Obstruction of the pylorus in infants** (*'New York Med. Journ.,'* 1916, ciii, *p.* 775).—**E. M. Sill** points out that this condition occurs almost always in breast-fed male babies, and so cannot be attributed to faulty feeding. The sudden onset points to the spasmodic element predominating at the beginning. The difference between pyloric spasm and stenosis is one of degree, not of kind, the autopsy almost always shows hypertrophy of the pylorus, but spasm may play an important part in the symptoms. A palpable tumour is not necessary for the diagnosis, the projectile vomiting and the peristaltic abdominal wave being sufficiently suggestive, associated with loss of weight and marked constipation. When a distinct pyloric tumour is felt surgery probably offers the best chance of recovery. The mother's breast-milk is the best diet, diluted if necessary; if not obtainable, suitably modified cows' milk, which should be low in fat and sugar. Stomach lavage twice daily should be given. Half to a drop of opium or atropine $\frac{1}{800}$ to $\frac{1}{500}$ gr. may help to allay spasm. The head of the bed should be

raised or a pillow placed under the child, so that it rests on an incline. This decreases vomiting and aids expulsion of gas.

J. Porter Parkinson.

**Diagnosis of pyloric stenosis and pyloric spasm by the duodenal catheter** (*'Arch. of Ped.,'* 1917, xxxiv, *p.* 199).—**W. W. Howell** thinks that the duodenal catheter offers the easiest and most reliable means of detecting a pyloric obstruction in doubtful cases in infancy. If a normal size catheter passes, it is safe to wait regardless of the other symptoms, and to regulate the diet. Increased pharyngeal, cardiac, and pyloric reflexes on the passage of a normal size catheter means spasm, and should be treated by stomach washing and regulation of the diet. Obstruction to the passage of a normal catheter or the passage of a catheter smaller than normal, with normal or diminished reflexes, means partial stenosis, and should be relieved by operation.

J. D. Rolleston.

**Congenital stenosis of the duodenum in an adult** (*'Journ. Amer. Med. Assoc.,'* 1916, lxvi, *p.* 1774).—**W. I. Terry** and **A. R. Kilgore.**—Congenital stenosis of the duodenum is an uncommon condition, and is almost always fatal in early life. The writers report the case of a man, aged 24 years, whose illness began twelve years ago with a year of intermittent, rather indefinite pain in the lower abdomen, followed by three and a half years of freedom, and then four years more of similar attacks at intervals of from three to four weeks. The pain was always below the umbilicus, extending 5 cm. to either side of the mid-line without radiation. There was no definite relation to food. It was relieved by hot drinks and occasionally by defæcation. It was usually worse at night. He had had no definite pain for five years, but four years ago vomiting had begun, and had grown progressively worse, usually coming after the evening meal, sometimes after other meals. There had never been hæmatemesis or melæna. During these four years there had been progressively increasing weakness, with dizziness, etc. His appetite had been good, but he had limited his diet through fear of vomiting, finding that liquid food gave him least trouble. The stomach was distended and showed peristalsis from left to right. Test meals revealed nothing abnormal, but a skiagram after a bismuth meal could not be obtained. A diagnosis was made of pyloric stenosis due either to an old ulcer or to a congenital condition. At the operation the stomach was found to be much dilated and low in the abdomen. There were some old adhesions across both the anterior and posterior aspects of the stomach toward the pyloric end, but none about the duodenum except two very thin strands between the pylorus and gall-bladder. The pyloric ring was much dilated. The first portion of the duodenum was dilated, the upper wall forming a definite pouch. Just distal to this dilated portion at about the junction of the first and second portions of the duodenum and above the entrance of the common duct, the intestine was evenly constricted to one-third or less of its normal diameter for about 1.5 cm. There was no thickening of the wall, and no scars could be found and no abnormalities of the peritoneum to account for the constriction. A posterior gastro-enterostomy was done, and when the stomach was cut into, marked thickening of the wall was noted in spite of the dilatation of the organ, indicating long-standing obstruction. The patient died on the fifth day from leaking of the gastro-enterostomy wound and early peritonitis.

T. R. Whipham.

**Congenital stenosis of the duodenum with chronic lactosuria** (*'Riv. di Clin. Pediat.,'* 1917, xv, *p.* 1).—**C. Francioni** reports the case of a child, 47 days old, admitted for vomiting—at first bile-stained, afterwards having the aspect of curdled milk, and lessened in amount by very careful dieting. There was no obstinate constipation and severe peristalsis such as is usually seen in pyloric obstruction. The vomit showed hardly any trace of free hydrochloric acid. The urine contained reducing substances to Nylander's reagent to an amount varying from 8–20 per 1000. Lactase was present in the fæces. Autopsy: To the right of the stomach was a sac resembling a second stomach, but smaller and continuous with the duodenum. There were no adhesions. Below this the intestines were normal. Liver slightly enlarged and congested, otherwise normal. Spleen large; kidneys hyperæmic; pancreas normal. The stomach itself was of normal aspect but slightly increased in size, the fundus being as well developed as in an adult, its walls generally thickened, except at the fundus, where they were thinned and dilated. No hypertrophy of pylorus. Gastric mucosa normal. The pylorus led to a cavity having a conformation identical with that of the stomach, but about one-third smaller, its greater curvature measuring 12 cm. This sac seemed produced by a dilatation of the horizontal portion of the duodenum and of its descending portion as far as the opening of the bile duct, where it was continuous with the remaining portion of the duodenum, which had a normal aspect. The walls of this sac were thicker than those of the lower portion of the duodenum, although less thick than those of the stomach. The mucosa was smooth owing to entire absence of valvulæ conniventes. At the lowest part of the sac was a longitudinal patch of 2 cm., showing loss of substance by ulceration affecting the whole thickness of the mucosa. Its margins were clean cut and its floor reticulated. The external wall of the duodenum corresponding to the ulcerated tract did not show any appreciable naked eye changes. The inferior extremity of the ulcer was hidden in a narrow passage, by which the sac was in communication with the underlying tract of the duodenum, and which was oblique in direction. On opening up the lower part of the duodenum a small orifice was disclosed which admitted a small probe with difficulty, and the continuation of the longitudinal ulcer was seen, on the floor of which opened the bile-duct, into which a probe could be passed, without, however, reaching the lumen of the pancreatic duct. VINCENT DICKINSON.

**Duodenal ulcer complicating burns in an infant** (*'Med. Journ. Austral.,'* 1917, i, *p.* 183).—**J. E. Ashby.**—A female child, aged 11 weeks and 17 days, died after extensive, accidental superficial burns of the face, neck, ears, part of the scalp, left shoulder, arm, and part of the back. Post-mortem examination revealed an ulcer on the lower side of the duodenal aspect of the pyloric sphincter. F. R. B. ATKINSON.

**Acidosis of gastro-intestinal origin** (*'Journ. Amer. Med. Assoc.,'* 1916, LXVII, p. 1351).—**H. D. Chapin** and **M. C. Pease** think that the cause of acidosis is sometimes to be found in a damage to the epithelium of the intestinal tract either by acids or bacterial products, thus allowing the absorption of toxic materials. In their series of cases the children at the time of the onset of the symptoms were on some form of whole milk modification or on a general diet which included milk. The feeds were low in fats, generally did not contain an abnormal amount of sugar, and were high, sometimes excessively high, in proteins. A hot day or night was almost

certainly followed by one or more cases of acidosis, and not infrequently the onset followed an early morning bottle of comparatively old milk. No case occurred in a child who was on a carbohydrate diet. It is not the bacteria themselves in the milk which cause the damage, but rather the products of their activity. Such products are the result of the breaking down of sugars and fats into acids or the poisonous products of the decomposition of proteins. Such a decomposition of the milk may take place before it reaches the child or after it has entered the alimentary tract. Acidosis results when these products are present in large amounts or when the organism is specially susceptible. Acidosis of gastro-intestinal origin is probably always closely connected with the proteins, and especially with the casein of milk, and this theory is supported by the fact that large amounts of indican are frequently found in the urine. Having noted that these children improved rapidly if they lived long enough for a cathartic to act, the authors ventured to try what starvation would do, though with some hesitation, as starvation is known to be the cause of a rapid increase of abnormal acids. Somewhat contrary to expectation, prompt improvement was found to follow the administration of nothing but water and a solution of sodium bicarbonate. An important part of the treatment is the evacuation of the contents of the bowels, and especially of the small intestine by a cathartic. The use of sodium bicarbonate is recommended as a valuable temporary measure until other measures which require time become effective. It should be pushed—by the stomach, colon, subcutaneously or intravenously—until the urine is alkaline or the blood shows a normal reaction. Milk should be eliminated from the diet for a considerable time, and a very slow return to proteins be made. The blood in these cases has a low carbon dioxide tension, the increased acidity of the blood stimulating the respiratory centre to an increased activity in order that there may be a reduction in carbon dioxide, since the hydrogen ion concentration of the blood must be kept at a normal level. The carbon dioxide tension is best estimated by the van Slyke method. T. R. Whipham.

**Azotæmia in the gastro-enteritis of early childhood** (*'Riv. di Clin. Pediat.,'* 1916, xiv, *p.* 513).—**G. Guidi** estimated the amount of urea in the cerebrospinal fluid of 21 children suffering from gastro-enteritis. With the exception of slight forms he found almost constantly present a more or less marked degree of azotæmia. It may be estimated by the amount of urea in the cerebrospinal fluid, and corresponds with a definite clinical picture, more or less evident according to the greater or lesser degree of the azotæmia itself, and may be considered as the expression of a true and special condition of nitrogenous malassimilation, and, beyond a certain degree, irremediable. Vincent Dickinson.

**Symptomatology of congenital intestinal obstruction** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 194).—**F. van der Bogert** records three cases: (1) Aged 2 months. Single stenosis of ileum 23 in. above ileocæcal valve (*vide* British Journal of Children's Diseases, 1912, ix, p. 231). (2) Aged 4 months. Incomplete obstruction of duodenum 2½ in. from pylorus. Duodenum above it markedly but not greatly dilated. (3) Aged 36 hours. Death after attempt to relieve condition by operation. The autopsy showed multiple stenoses of the ileum, as in the case recorded by Drennan and Clark (*vide* British Journal of Children's Diseases,

1916, xiii, p. 310). Vomiting and constipation were present in all. Abdominal distension, which was marked in Case 1, was slight in Case 3.

J. D. Rolleston.

**Chronic digestive disorders in children** (*'Journ. Amer. Med. Assoc.,'* 1916, lxvii, *p.* 1569).—**C. G. Kerley** and **L. T. Le Wald** are of opinion that certain cases of gastro-intestinal disorders in children are due to mechanical causes, as can be shown by means of the X rays. Such disturbances are characterised by one or more of the following symptoms: repeated attacks of acute indigestion with vomiting; abdominal distension, transient or habitual; repeated attacks of intestinal colic; habitually loose evacuations; extreme constipation or periodic fever associated with intestinal symptoms. Probably many of the cases of ptosis of the stomach and intestine found in adults are of a congenital nature, or have their origin during child life because of erroneous habits in eating. The child of 5, 6, or 8 years eats a large meal three times a day and with this drinks two or three glasses of milk, which he is urged to take, all of which means that 2 lb. of food or more are placed in the stomach (more weight than many can accommodate), and ptosis results. A series of illustrative cases is recorded.

T. R. Whipham.

**Intestinal obstruction due to ascaris lumbricoides** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 244).—**J. M. Perret** and **H. T. Simon** report the case of a girl, aged 8 years, who had frequently passed round worms since the age of two. Five brothers and sisters had also done the same. Signs of intestinal obstruction developed, and an enema brought away a mass of about forty round worms. Recovery was complete.

T. R. Whipham.

**Ruptured appendix found at autopsy in an infant suffering from colon bacillus infection of the urinary tract** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 772).—**F. van der Bogert.**—A male infant, aged 15½ months, whose only previous illness had been severe inflammation of the prepuce some months previously, was taken ill suddenly with vomiting and high temperature. The urine showed muco-pus from which *B. coli* was cultivated. The vomiting became more severe and the abdomen distended. Death took place in three days. The autopsy showed free pus in the abdomen, an appendix ruptured near its distal end, with a fæcal excretion above the point of rupture, apparently normal kidneys, and a congested bladder.

J. D. Rolleston.

**Pylephlebitis following appendicitis** (*'Journ. Amer. Med. Assoc.,'* 1916, lxvi, *p.* 1450).—**H. H. Lissner** reports the case of a boy, aged 12 years, in whom pylephlebitis had occurred as the result of a non-suppurative appendicitis. The portal vein and its mesenteric branch were filled with a thrombo-purulent mass which was followed down to a small vein leading from the appendicular region. In the liver numerous dark necrotic areas occurred along the course of the portal vein, some of which contained small quantities of pus. The writer comments upon the infrequency of this complication.

T. R. Whipham.

**Adenitis in the iliac fossa simulating coxalgia** (*'Journ. de Méd. de Paris,'* 1917).—All inflammations which can be propagated to the iliopsoas

muscle, causing its contraction, may be confused with coxalgia, such as appendicitis and Pott's disease. Chronic adenitis in the iliac fossa may produce the attitude of coxalgia and even apparent lengthening of the limb, but the movement of abduction is normal, and pressure behind the head of the femur does not cause pain. Sometimes the diagnosis is difficult. In adenitis also there is an absence of pain at night and during walking, and a diminution of lameness under the influence of exercise. There is an absence of osseous changes in the radiograph. J. Porter Parkinson.

**A case of Hirschsprung's disease, with bibliography to January 1, 1916** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 665).—**R. Cadwallader** records a case in a boy, aged 9 years, sent to hospital with the diagnosis of tuberculous peritonitis. The mother stated that the bowels had never been moved without enemata. The whole abdomen was enlarged, and there was a peculiar line across it running from the left anterior superior spine to the neighbourhood of the cartilage of the 8th right rib The abdomen was opened by a median incision; the upper sigmoid, descending colon, and part of the transverse colon were cut away, and an end-to-end anastomosis was done Recovery was uneventful. J. D. Rolleston.

**Congenital megacolon (Hirschsprung's disease)** (*'Cleveland Med. Journ.,'* 1917, xvi, *p.* 88).—**C. A. Hamann** records two cases: Case 1: Boy, aged 15 years, constipated since birth, and abdomen prominent since age of 8 or 9 years. An artificial anus was first established by stitching the sigmoid to the parietal peritoneum over an area of $1\frac{1}{2}$ in. in diameter and opening it a few days later. Quarts of fæcal material were dug out with a spoon, aided by an irrigator, but a mass larger than an orange remained even after a month of almost daily effort to cleanse the bowel. On April 13 the artificial anus was closed, and the abdomen opened through the former incision. The large intestine was divided at about the middle of the descending colon and about 5 in. above the anus. The ends of the bowel were closed, and a lateral anastomosis made on the left side of the rectum. Recovery was uneventful. Case 2: Boy, aged $2\frac{1}{2}$ years. Obstinate constipation and enlargement of the abdomen since early infancy. No preliminary colostomy. 10 in. of the large intestine were removed, comprising mainly the sigmoid, the ends of the gut closed, and a lateral anastomosis made. Death occurred from peritonitis at the end of a week.
J. D. Rolleston.

**Lymphosarcoma of the sigmoid** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 721.) —**A. L. Goodman.**—A girl, aged 4 years, was admitted to hospital for chronic constipation, abdominal pain, and bleeding from the rectum, accompanied by extreme pallor and weakness, which began about three weeks before admission, when her mother had noticed a hard lump in the abdomen. This sudden appearance and sausage shape suggested intussusception, but the painlessness of the tumour, the absence of vomiting, duration of the swelling, and general glandular enlargement were in favour of a new growth. On operation a tumour was found 6 in. long and 3 in. wide in the sigmoid and removed. Death took place four days later. The autopsy showed thickening of the intestinal wall, the mucosa of which was extensively ulcerated. The cross section of the gut was milky-white like lymphoid tissue. Microscopical examination showed the tumour to be a lymphosarcoma. J. D. Rolleston.

**Experimental studies of the intestinal flora** (*'Amer. Journ. Dis. Child.,'* 1917, XIII, *p.* 117).—**W. R. Sisson,** from experimental studies in the intestinal flora of puppies came to the following conclusions: (1) In puppies the types of organisms occurring at the duodenum, ileum, cæcum, and rectum are in all instances similar. One cannot speak of a characteristic local flora in these regions. (2) Administration to puppies of cow's milk mixtures with high percentages of sucrose or lactose does not cause characteristic changes in the intestinal flora at any level, even when a diarrhœa is produced. (3) Starvation of twenty-four hours causes a relative amicrobism of the small intestine. J. D. ROLLESTON.

**An obscure abdominal case** (*'Dub. Journ. Med. Sci.,'* 1916, I, *p.* 359).—**G. E. Nesbitt,** at a meeting of the Royal Academy of Medicine in Ireland, Section of Pathology, showed the kidneys and portion of small intestine, from a case with puzzling clinical symptoms. The patient, a girl aged 15 years, had been admitted to hospital for nephritis, the urine containing 0·4 per cent. of albumin and half the normal output of urea. The arteries were distinctly hardened, the aortic second sound accentuated, and the blood-pressure raised. She complained of occasional abdominal pain, for which no satisfactory explanation was apparent. She had no fever. On the tenth day after admission, she had a sudden large hæmorrhage from the bowel. The abdominal pain became acute and she vomited frequently. As these symptoms persisted for two days without improvement, laparotomy was performed. The abdomen was found to be normal, with the exception of the lower end of the ileum, which was studded with hæmorrhagic areas running for the most part in a transverse direction. The appearance was somewhat suggestive of typhoid, and the same day the blood was examined, with a positive reaction, for *B. paratyphosus* A in dilution one in eighty. Two days later the child died A limited autopsy was performed. The abdomen contained pus, due to two small perforations. The lower end of the ileum showed numerous small circular ulcers of various depths. Peyer's patches were not affected, nor were the mesenteric glands or spleen enlarged. The colon and cæcum were free. The left kidney was large and granular, with large adherent capsule. The right was congenitally small, about the size of a walnut. The clinical history and pathological findings seemed to be opposed to a diagnosis of paratyphoid, but, in the absence of complete bacteriological investigation, no definite opinion could be expressed. J. ALLAN.

**Studies on parenteral infections** (*'Arch. of Ped.,'* 1916, XXXIII, *p.* 671). —**J. R. Gerstley** draws the following conclusions from the study of 200 cases of parenteral infections—*i. e.* coughs and colds: (1) Parenteral infections in many cases are associated with mild or moderate diarrhœa; (2) if the child is allowed to drink as much water as he sees fit, this diarrhœa rarely develops into a severer disturbance; (3) in many cases the diarrhœa and vomiting is due to drugs given for the parenteral infection; (4) in some cases the cough seems directly secondary to the nutritional condition, and disappears as the nutrition improves. J. D. ROLLESTON.

**The reaction of the child to a faulty environment** (*'Practitioner,'* 1916, XCVII, *p.* 61).—**H. C. Cameron.**—A most instructive paper, in which the author insists upon the great frequency, among the children of the poor, of catarrhal infections of all sorts, and that this is due to the evil effects

upon the organism of a faulty diet and a faulty environment. The tendency to catarrhal infections is a special characteristic of childhood, and even of healthy childhood. This commonness of catarrhal affections in the children of the poor is such that a considerable percentage show, after death, lymphatic enlargement (save after long illness). Although "status lymphaticus" *may be* the reason for sudden death without adequate cause being patent post-mortem, many such deaths are undoubtedly due to lowered resistance to infection. The author points out that out-patient children, though catarrhal, may often be plump, rounded, and high-coloured. On examination, however, there can be found a host of manifestations indicative of lowered resistance. A second group of children is pale, undersized, and wasted, with intractable secondary dyspepsia; the children who have suffered a constant repetition of catarrhal affections. One paragraph is specially worth quoting: "For some years I have felt convinced that the post-mortem appearance, to which the name status lymphaticus has been applied, is found only in children who have exhibited this fictitious appearance of health with persistent, though quiescent, catarrhal infections, and who have met their death without preliminary wasting or dehydration of the body." No name has yet been given to the conditions thus described by the author, who suggests the expression "catarrhal state." In discussing etiology, three factors are considered—heredity, faults of hygiene, and faults of diet. Confinement to hot rooms and a town life are important causes. Air-borne respiratory infections are very common, even in hospitals, and something is said as to the evils of the "hospitalising" of infants. Among faults of diet, artificial feeding and excess of one constituent (generally sugar or starch) in the food are prominent. In conclusion, attention is drawn to the relation between the catarrhal state of rheumatism and tuberculosis.

MACLEOD YEARSLEY.

## Dermatology and Syphilis.

**Dermatology in relation to child welfare** (*'Edin. Med. Journ.,'* 1917 I, *p.* 401)—**R. C. Low** thinks that the two diseases with regard to which something might be done are tinea capitis and pediculosis capitis. In cases of the former he discusses notification, isolation, and disinfection. **Norman Walker** (*ibid.*, 1917, I, *p.* 396) refers to pediculosis (and impetigo), ringworm (and favus), and scabies, and deals especially with practical preventive measures.

J. ALLAN.

**Congenital alopecia** (*'Boston Med. and Surg. Journ.,'* 1917, CLXXVI, *p.* 210).—**J. H. Blaisdell, A. R. Cunningham,** and **C. J. White.**—A boy, aged 4 years, was brought to the clinic because he had only four teeth and almost no hair, and also because he caught cold easily and wetted the bed. The hair on the scalp was extremely scanty, and consisted of thin, straight tufts about ½ in. apart and 1 in. long. The scalp was parchment-like owing to lack of subcutaneous fat. The skin of the entire body showed a mild xerodermia, which was accentuated on the face, hands, and extensor surfaces. Sections of the skin showed deficiency of vessels, hair follicles, sweat, and sebaceous glands.

J. D. ROLLESTON.

**Epidemics of pemphigus neonatorum** (*'Journ. Amer. Med. Assoc.,'* 1916, LXVII, *p.* 1522).—**F. H. Falls** communicates a preliminary report on eight small epidemics of pemphigus neonatorum which have occurred in

Chicago within the last year. The disease is highly contagious, and can be transmitted through the medium of a third party who is not infected. Prompt isolation is necessary, and the most efficacious treatment is to apply a 2 per cent. white precipitate ointment after rupturing the vesicles. Vaccines have been tried, but it is too early yet to judge of their efficacy. The author has obtained from the lesions a staphylococcus which morphologically differs from the ordinary staphylococcus in that it appears as a kidney-shaped diplococcus with a tendency to form short chains. The organism conforms with Koch's laws. T. R. Whipham.

**Epidermolysis bullosa** (*'Urol. and Cut. Rev.,'* 1916, xx, *p.* 378).—**A. W. Nelson** adopts Luitlen's division of this disease into two groups: (1) simple, (2) dystrophic. In the simple group the bullæ may appear on any part of the body after irritation of the skin. The mucosæ are seldom affected. The disease may appear at birth or shortly after. There is also an hereditary tendency to the disease. Most cases get worse in summer and improve in winter. The blebs heal without scarring. In the dystrophic group the hereditary nature is not so constant. The extremities are the seat of predilection with symmetry as a characteristic. The hands, feet, elbows, knees, and anterior surfaces of the legs are most frequently involved. The face and head usually escape. The blebs collapse and tend to the formation of crusts and scabs, and after healing the site of the lesions presents scarring and pigmentation. The mucous membrane of the mouth may become thickened, and there may be scarring of the lips and changes in the gums. Marked degeneration of the nails is a prominent feature. Nelson records an example of this group in a boy aged 11 years in whom the disease began when he was 9 days old. J. D. Rolleston.

**Sacral blue markings in children** (*'La Pediatria,'* 1916, xxiv, *p.* 577).—**A. Filia** made a systematic search for mongoloid blue markings among the children at Sassari for a period of 20 months, during which he found 63 cases out of 2588 children. They were almost equally divided among the sexes, most numerous under 1 year of age, diminishing rapidly in frequency after the second year, while none were found after the fifth year. The mean percentage of cases was 2·43 per cent., showing a striking difference between that found by Cozzolino in the adjacent town of Cagliari, 6–8 per cent. (*vide* British Journal of Children's Diseases, 1915, xii, *p.* 251). The author draws attention to the fact that the inhabitants of the latter province are distinctly of a darker type, more approaching that of the Arab than those of Sassari, where chestnut brown hair is frequent; moreover, there is much commercial activity between Tunis and Cagliari, whereas Sassari has from ancient times traded mainly with Tuscany and Liguria. He gives illustrations of these markings occurring in three sisters, and cites one case observed by him where, in addition to the sacral marking, there was a patch on the forehead. There is only one other recorded case where the marking was localised on the forehead in a white child.

Vincent Dickinson.

**Livedo reticularis** (*'Brit. Journ. Derm.,'* 1916, xxviii, *p.* 281).—**H. G. Adamson** refers to the papers of Jourdanet (*vide* British Journal of Children's Diseases, 1912, ix, p. 279), Guille (*ibid.*, 1913, x, p. 40), and others, and records some personal cases in girls aged from 11 to 15 years, who all had "chilblain circulation" and generalised livedo annularis, and

some had marked glandular enlargement or splenomegaly. His conclusions are as follows: (1) The dusky marbling or network known as livedo annularis is the result of the tuft-like arrangement of the blood-vessels of the skin. The network corresponds to the regions of reduced circulation between the tufts. (2) It occurs as a normal condition in many children and young adults and is exaggerated as a result of exposure to cold. (3) In departure from health, due to tubercle, syphilis, rheumatism, etc., the normal livedo annularis may become exaggerated and persistent, possibly from a toxic action upon the splanchnic plexus. (4) In such persons the position and pattern of eruptions due to syphilis or tubercle may be determined by the livedo, so that the eruption takes a network aspect and may be called "inflammatory livedo." (5) A similar inflammatory livedo with subsequent pigmentation follows prolonged exposure of the skin to heat—*livedo a calore*. (6) The distribution and arrangement of certain eruptions by secondary syphilis or measles is explained by the anatomical arrangement of the blood-vessels of the skin which gives rise to livedo annularis.

J. D. Rolleston.

**Livedo annularis vel reticularis in children** (*'Riv. di Clin. Pediatr.*, 1916, xiv, *p.* 83).—**L. Concetti.**—This subject has hitherto received scant attention from writers on pædiatrics. In the adult the most common cause of this condition is exposure of the lower limbs to the heat of a fire; but in children, where no such external cause exists, it must be sought in some modified constitutional state. Usually the subjects are lymphatic children with a skin whose venous system is in a congenital state of unstable resistance and of easy dilatability, with readiness of the blood to yield part of its colouring matter more or less transformed, and easy diffusability. Usually the condition exists from birth or appears soon after. It is more marked in cold weather and when the child is stripped and in the erect posture; less marked during febrile complaints and in hot baths, when the cutaneous circulation becomes more active. The condition is not rare, but escapes observation, since not being, strictly speaking, a disease, the children do not present themselves for treatment. Comby collected 22 cases, of which 2 were syphilitic, 2 had myxœdema and mongolism, in 6 there was active or latent tuberculosis, in 7 a neuro-arthritic diathesis. Fourteen were females, and 8 males. The thighs and forearms were chiefly affected.

Vincent Dickinson.

**Atrophodermia reticulata symmetrica faciei** (*'Med. Press,'* 1916, i, *p.* 487).—**G. Pernet** reports a case in a girl, aged $12\frac{1}{2}$ years, who had nothing the matter with the skin, until she had measles at the age of 4 years. As a sequela, the skin of the face became rough, and remained so until about a year ago, when the two cheek areas began to take on their present appearances. There has never been any sign of ulceration or pustules about the affected areas. Last Christmas (1915) the child had an attack of German measles, but the eruption was not at all bad on the face. Cold winds made the areas red. Nothing had ever been applied to them in the way of treatment. The affected areas of the cheeks are roughly triangular and more or less symmetrical. The parts are slightly reddened, and have a honeycombed appearance. On close examination with a lens, a superficial atrophy of the skin can be made out. The picture is that of a fine network, the meshes of which form a raised, delicate tracery, enclosing slightly depressed atrophic areas. At the borders of the patches small pin-poin

depressions can be seen. The slight blushy redness is due to a certain amount of telangiectasis here and there, especially about the margins of the affected areas. With the exception of a slight degree of xerodermia about the legs, the patient's skin generally is good. J. Allan.

**Eczema in children** (*'New York Med. Journ.,'* 1916, civ, *p.* 1274).—**G. W. Crary** shows that eczema in infants is usually due to faulty feeding, and most authorities believe in reducing the food to the caloric requirements. Many prohibit stewed fruits and cream. The author forbids eggs and sugar in the diet of the older babies. The local dressing should be absorbent and not impervious to it, hence pastes are better than ointments. He uses Iceland moss jelly as the base, or to dilute the petrolatum base. He believes in a mild antiseptic as resorcin monoacetate 1·2 or 3 per cent. With this 5 to 10 per cent of ichthyol may be combined.

J. Porter Parkinson.

**Eczema in infants and young children** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 523).—**C. G. Kerley** points out that among the disorders of infants and young children that stand apart from those of a serious nature there is none that is of as much annoyance to the patient and the patient's family as eczema. Not only is it unsightly, but as a consequence of the discomfort to the patient nutrition and growth may be seriously interfered with in severe cases. Eczema in the young may be due to widely different causes. It may be the expression of faulty processes relating to food utilisation or the evidence of an immediate reaction against specific food substances. On the other hand, it may be due to conditions entirely external. The causative factors in eczema from internal sources are discussed. The management of eczema, especially from the dietetic point of view, is considered. The author is not in accord with any theory relating to a special constitutional state such as the exudative diathesis as necessary for eczema, for the following reasons: that a combination of high butter fat, high sugar of the arts, orange juice and beef juice will produce an eczema in many children who never show the condition when normally fed. Further, eczema may be produced by many foods of widely varying types. One reason for the frequency of eczema in children is because the child is unable to adjust itself to the many varieties of food and food elements which are given him, whether natural or artificial. J. Allan.

**Staphylococcia with xerodermia** (*'Lancet,'* 1916, i, *p.* 733).—**G. Pernet,** at a meeting of the Royal Society of Medicine, Section of Dermatology, showed a case of staphylococcia in a girl with xerodermia (staphylococcia *en nappe et en foyers à progression excentrique*). He objected to the suggested diagnosis of eczema, as the lesions began as pustules, on a xerodermic skin, and not until the child was two years old.

J. Allan.

**A case of grouped comedones** (*'Med. Press,'* 1916, ii, *p.* 477).—**G. W. Sequeira,** at the New London Dermatological Society, showed a case in a boy, aged 7 years, who presented on his forehead grouped comedones, densely packed and symmetrically placed. The usual sites in the young are the upper part of the forehead and occiput in boys, and temples in girls, and the cheeks in infants at the breast. Occasionally the eruption occurs in other situations. It does not seem to bear the relationship to acne that the

ordinary comedo does. These comedones are usually smaller, more densely packed, and grouped as in the case shown. The contents are rather firmer, they do not often inflame spontaneously, but do so if roughly squeezed. The cause of the affection is not definitely known, but the spores of Malassez are present in large numbers. Crocker was of opinion that dyspepsia was the most common cause. The cases seen by the author have all been due to local irritation. Warmth and moisture seem to contribute to the cause. It sometimes develops simultaneously in several members of a family and also in schools, suggesting a contagious or bacterial factor. Infection from cups is also a probable cause. J. Allan.

**Fungoid bromoderma: a case of bromide eruption** (*'Urol. and Cut. Rev.,'* 1917, xxi, *p.* 203).—**M. Scholtz** records a case in an infant twenty months' old suffering from restlessness, who was being treated with one grain doses of sodium bromide three hourly. Two bottles of a two ounce mixture were used by the doctor's orders and a third was refilled by the mother herself. While the third bottle was being taken the eruption appeared first on the legs, and then on the thighs, forearms, arms, and face. The trunk, hands, and feet escaped. On the face the lesions resembled severe smallpox in the stage previous to pustulation. The discrete lesions on the upper limbs simulated closely erythema multiforme. The confluent patches just above the ankles were very suggestive of fungoid granulomata of blastomycosis type or pigmented sarcomata. At the same time all the lesions could be taken for tertiary syphilides. Treatment consisted in elimination through the kidneys and intestines and external applications of saturated solution of alum acetate and Goulard's extract equal parts, a tablespoonful to a glass of water. The disappearance of the lesions was slow. J. D. Rolleston.

**Chromidrosis and bromidrosis in a girl of 14** (*'Arch. de Méd. des Enf.,'* 1917, xx, *p.* 147).—**J. Comby.**—The patient was a nervous and anæmic child, who presented keratosis pilaris, fœtid hyperidrosis especially in the axillæ, which stained the linen black (melanidrosis). Non-gonococcal leucorrhœa was present. J. D. Rolleston.

**Treatment of psoriasis** (*'Med. Press,'* 1917, i, *p.* 106).—**W. K. Sibley** at a meeting of the London Dermatological Society brought forward a case of psoriasis in a patient, aged 13 years, which was of seven years' duration. He said that his experience was that where there was renal disturbance, extract of burdock was the best kind of treatment, and where there was gastro-intestinal disturbance, he used intra-muscular injections of emetine 1 gr. with good results. J. Allan.

**Congenital syphilis** (*'New York Med. Journ.,'* 1916, civ, *p.* 293).—**F. Wise.**—Mueller's plan consists of either twelve calomel injections combined with eight of neosalvarsan 0·005 to 0·15 grm., or a six weeks' inunction course of ung. cinereum, also combined with eight neosalvarsan injections. Both courses extend over three months, then after a three months' rest another similar course is given followed by a third course after another rest of three months. In nursing infants it is best to avoid inunction on account of the delicacy of the skin and its small cells, then he employs 0·001 grm. of calomel and 0·015 grm. of neosalvarsan per kgm of body weight. The

injections are given in the nates, but the neosalvarsan is best given into the veins of the scalp or leg. After these courses the Wassermann reaction is taken and upon this depends the question of further treatment.

J. Porter Parkinson.

**Observations of 100 cases of the infantile type of hereditary syphilis** (*'Am. Journ. Dis. Child.,'* 1916, xi, *p.* 177).—**B. S. Veeder** and **P. C. Jeans.**—A syphilitic rash or cutaneous lesion of some type was present in 77, and absent in 23. Rhinitis was present to a greater or less extent in 74, and absent in 26. In 82 the spleen was definitely palpable, and in 18 it could not be felt. Epiphysitis or Parrot's pseudo-paralysis was present in 14 and absent in 86. Of 77 whose weight was recorded, 7 were over weight, 10 of average weight, and 60 below the average. In 85 per cent. the symptoms appeared in the first two months of life and about two-thirds of these in the first month. Rhinitis was the most frequent earliest symptom. The Wassermann reaction, which was made in 82 cases, was positive in 92·6 per cent., doubtful in 1·3 per cent., and negative in 6·1 per cent. Most of the negative findings were in the first few weeks of life. Practically all the deaths occurred in the first few months. As a general rule, infants over 10 months do not die of syphilis itself. Of the 100 cases 28 were known to be dead, 28 were alive and over 10 months, and 44 were alive and under 10 months. Of these last 12 were in an absolutely hopeless state, so that the mortality would probably be 40 per cent. The mortality of the artificially-fed infants was much higher than that of the breast-fed. The best results were obtained by two injections of neo-salvarsan, given in doses of ·075 grm. to ·15 grm. into the median or external jugular vein with a three day interval, followed by a series of courses of grey powder (1·5 gr. t.d.) of a month or six weeks with an interval of ten days to two weeks between the courses. These should be continued well into the second year till the Wassermann reaction becomes negative. J. D. Rolleston.

**Frequency of hereditary syphilis** (*'Amer. Journ. Dis. Child.,'* 1916, xii, *p.* 355).—**F. S. Spooner** and **R. S. Austin.**—The literature on the incidence of hereditary syphilis shows a wide range of results, the estimates varying from 2 to 14 per cent. in Europe and America. A study of 695 patients in the Children's Memorial Hospital at Chicago during the winter of 1915–16, including clinical and laboratory methods of investigation, showed an incidence of 3·3 per cent. The amount of hereditary syphilis among hospital infants and children in New York, St. Louis, San Francisco, and Chicago appears to range from 2–6 per cent. J. D. Rolleston.

**Hereditary syphilis in children** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 125).—**L. E. La Fetra** reviews the later manifestations after the age of one year and discusses the significance of various signs and symptoms. The most characteristic manifestations of late hereditary syphilis are the changes that take place in the long bones. There is either a simple hyperplastic periostitis or osteoperiostitis or a gummatous osteoperiostitis or a gummatous osteomyelitis. The most important lesson one derives from a consideration of the symptoms and signs is the well worn conclusion that an early diagnosis with its corollary of vigorous treatment is of the highest possible value to the patient. As an aid to this early diagnosis in doubtful cases the Wassermann test, carefully made by a competent man, may be relied upon absolutely. It is exceedingly rare that the test fails to comport

with the physical signs, and in such cases there is usually either delay in having the blood reach the laboratory, the serum becoming anti-complimentary, or there is something wrong with the antigens used in the test. The more frequently the Wassermann test is employed—especially in mental and nervous cases—the greater number of correct diagnoses we shall make, and the greater our success in treating these distressing conditions.

J. Allan.

**Landau's reaction in congenital syphilis** (*'La Pediatria,'* 1916, xxiv, *p.* 129).—**L. Chiaravalloti** practised Landau's new technique on 424 cases, of which 373 were syphilitic, including cases which, although clinically definite, did not react positively to serum diagnosis, and 50 definitely non-syphilitic. His conclusions were that Landau's reaction was specific for syphilis, that its sensitiveness was greater than Wassermann's but less than that of Noguchi, and that the percentage of positive reactions was greater in latent forms. The modified technique was as follows: A solution of 1 per cent. iodine in tetrachloride of carbon was used, of which 0·10 c.c., which must be recently prepared and clear, was added to 0·20 c.c. of serum, which must also be fresh and clear, neither lipæmic nor containing hæmoglobin. The mixture is left for 4½ hours without shaking. Syphilitic serum then assumes a clear yellow tint, while normal serum becomes cloudy grey.

Vincent Dickinson.

**The so-called "post-erosive syphiloids" of Jacquet** (*'Riv. di Clin. Pediat.,'* 1917, xv, *p.* 281).—**C. Vignolo-Lutati** reviews the subject of dermatitis in the new-born infant, calling particular attention to those forms of erythema described by Jacquet in 1886. In the case of a badly-nourished child of 5 months the internal surfaces of the nates, thighs, and neighbourhood of the arms and vulva showed a number of lenticular elevations, somewhat hard, abraded on the surface, moist, red and shiny, circumscribed by a thin edge of whitish epidermis. The Wassermann reaction was negative, and spirochætes could not be detected in the scrapings. A bioscopy showed three stages in the eruption: (1) Erythematous, equivalent to the variety erythema simplex or dermatitis of the first degree; (2) papuloid; (3) vesicular, equivalent to erythema vesiculosum or dermatitis of the second degree. When from rupture of the vesicles the eroded surface of the papules remains necessarily exposed owing to the seat of the lesion to the irritant action of friction, fæces, urine, and subsequent secondary infection, the morphological appearance becomes modified and produces an exaggeration of its essential characteristics—*i. e.* post-erosive papular erythema or post-erosive syphiloid. The infant, however, must be regarded with suspicion until the necessary serological investigations have been carried out. An ointment of 10 per cent. dermatol and treatment by lactic ferments will usually effect a cure.

Vincent Dickinson.

**Syphilitic bone and joint lesions simulating tuberculosis** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 366).—**A. L. Fisher** draws attention to the similarity which exists between syphilitic and tuberculous lesions of the bones and joints. He has seen eighteen such cases, and a consideration of them raises several interesting questions: Why do we get so many negative Wassermann reactions in bone syphilis? The percentage seems fairly high, at least 10 per cent. Is it because of the chronicity of the disease, and the lack of amboceptors in the blood, not sufficient being set

free to bind the complement? In a manner, it is, perhaps, somewhat comparable to the fact that in a chronic, pyogenic abscess there is no increased leukocytosis. Another point that these cases emphasises is that fixation of syphilitic joint neither gives relief nor aids in a restitution of the part to normal. Another point is the large proportion of children in these cases, eight out of eighteen, or really eight out of fourteen, being under ten years of age, quite a contrast to the ordinary teaching that syphilitic joints are not common in childhood. The therapeutic test is the most reliable in the diagnosis of syphilis, and this should never be omitted in trying to arrive at a conclusion as to the nature of a chronic process in and about a joint.

T. R. WHIPHAM.

**Syphilis with neurological symptoms simulating other conditions** (*'Journ. Amer. Med. Assoc.,'* 1916, LXVII, *p.* 1497).—**D. A. Haller** and **I. C. Walker** point out that syphilis affecting the nervous system may easily be mistaken for other diseases. Among the cases quoted is that of a boy, aged 3½ years. There was no history of syphilitic infection, and there were no symptoms suggestive of syphilis in either of the parents or in the child. Both parents gave a negative blood serum Wassermann reaction. The child had had no previous illness, except scurvy at the age of 1 year. During the six months previous to admission to the hospital the child had had some discomfort about the right ear. For two months previously he had had headaches of varying intensity with occasional vomiting. One month previously he had had some retraction of the head of three days' duration. One week previously he had had an increase in severity of all these symptoms. Four days previously the symptoms had presented a picture of meningitis, and antimeningococcus serum was given intraspinally. Following this, two lumbar punctures had been performed, but at no time were any organisms found in the spinal fluid. On admission to the hospital, the child showed evidences of an acute meningitis. His temperature was 103° F., and his pulse was 180 per minute. There was retraction of the neck and a double Kernig's sign. There was slight photophobia, and the pupils were moderately dilated. He moaned continuously, and screamed with pain whenever an attempt was made to move him. The white blood count was 29,000 per cubic millimetre. A differential count showed 70 per cent. polymorphonuclears, 18 per cent. small mononuclears, and 12 per cent. large mononuclears. The Wassermann reaction in the blood serum was strongly positive. The spinal fluid was purulent and contained 9800 white cells per cubic millimetre; the differential count showed 62 per cent. lymphocytes, 26 per cent. polymorphonuclears, and 12 per cent. endothelial cells. The Wassermann reaction in the spinal fluid was positive with 0·1 c.c. The child was under observation for 11 days without treatment, and without any change in his condition except for temporary relief following lumbar puncture. Treatment was then begun with intraspinal injections of salvarsanised serum at frequent intervals, and an occasional dose of salvarsan was given intravenously. The child improved rapidly, and returned to normal except for partial deafness. In 4 months the Wassermann reaction in the blood serum became negative, and in the spinal fluid it became negative with 2 c.c. The spinal fluid showed a cell count of 5 per cubic millimetre and a negative globulin test. One year has elapsed since treatment was begun, and the patient continues free from symptoms.

T. R. WHIPHAM.

**Syphilis in the parents as a cause of feeble-mindedness in the children** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 129).—**H. H. Goddard** maintains that syphilis is not an important ætiological factor in feeble-mindedness and he asks, if syphilis is a cause of feeble-mindedness, and if syphilis is as prevalent as it is believed to be, can we escape the conviction that the percentage of feeble-minded people would be enormously increased over our present estimate? So far as is evident from this study, it would seem that syphilis causes general paralysis, death in infancy, miscarriage, physical deformities and abnormalities, but not feeble-mindedness. In other words, it is too powerful a poison merely to maim the offspring. It kills. J. Allan.

**The value of the Wassermann reaction in mental deficiency: Study of 78 cases** (*'Arch. of Ped.,'* 1916, xxxiii, *p.* 273).—**A. Gordon.**—50 per cent. gave a positive serum reaction, and in 17, in which the spinal fluid was also obtained, the Wassermann reaction was parallel in both except in 3 cases. Every one of the positive cases was treated with antisyphilitic remedies. Improvement in general health was observed in all so treated. The defective mentality in idiots and genuine imbeciles remained irresponsive. The feeble-minded with epilepsy showed decided improvement, but the most striking improvement was obtained in weak-minded children with functional nervous disturbances. J. D. Rolleston.

**Syphilis as an ætiological factor in Mongolian idiocy** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 777).—**J. E. McClelland** and **H. O. Ruh** disprove the statements of Stevens and others that there is a connection between Mongolian idiocy and syphilis (*vide* British Journal of Children's Diseases, 1915, xii, p. 255; 1916, xiii, p. 255). From their investigations on a series of cases they come to the conclusion that it cannot be stated at the present time that Mongolism is due to congenital syphilis. T. R. Whipham.

## Treatment.

**The intravenous and intramuscular administration of diphtheria antitoxin** (*'Journ. Missouri State Med. Assoc.,'* 1915, xii, *p.* 145) —**B. S. Veeder.**—The following rules are adopted at the St. Louis Children's Hospital. All patients with clinical diphtheria receive antitoxin on admission, regardless of whether or not a culture has been taken. In mild and moderately severe cases from 3000 to 5000 units are given intramuscularly. In all severe or septic cases, and in all cases with laryngeal involvement, 5000 units are given intravenously. All cases seen late (fourth day) are given antitoxin intravenously if the membrane is at all extensive. Individuals exposed to diphtheria are given an intradermic diphtheria toxin test (Schick test). In case the toxin reaction is positive in 24 hours, 1000 units of antitoxin are given subcutaneously in older children, and 500 units in children under two years. J. D. Rolleston.

**Considerations and experiments on cases of diphtheria treated without serum** (*'Riv. di Clin. Pediat.,'* 1916, xiv, *p.* 1).—**E. Modigliani** treated 282 cases of diphtheria at the Policlinico, Rome, all bacteriologically verified, 120 with serum and 162 without. He found that in the serum treated the fauces became clean on an average in from three to five days,

calculating from the commencement of the treatment. The specific organism remained in the naso-pharynx and larynx for a long time afterwards from a minimum of 38 to a maximum of 84 days. In analogous cases in form, localisation, and extent treated without serum, the fauces became clean on an average in from 9 to 15 days, calculating from the day the cases came under observation, usually the third or fourth day of the disease. Examination for organisms in the nasal, pharyngeal and laryngeal secretion was negative in a much shorter time than in the serum treated, after the fauces were clean, generally two to three days only. Other researches made by the author were (1) On the microscopic evolution of the false membrane and cellular reactions and the focus of infection. It was found that leucocytosis was part of the pathological process in itself, most active superficially where there was membrane. There seemed to be no greater number of leucocytes in the cases not serum treated compared with those so treated. The study of phagocytosis is rendered nugatory by the presence of other organisms. (2) Deviation of complement. The author never succeeded in verifying this either by the presence of antibodies or antigen in the blood of diphtheritics. These results differ from those of other observers. (3) Modification of the virulence of the organism. Cases treated without serum; the virulence was marked in the first days of the disease, causing death in animals in two to four days, then became gradually attenuated and almost disappeared. Cases treated with serum; the virulence in the first days was about the same as in the previous case, but became only slightly attenuated after the fauces were clean so as to kill guinea pigs in from five to seven days. It remained marked for about nine days after clinical cure and only disappeared about twenty-six days later. VINCENT DICKENSON.

**Post-diphtheritic paralysis and serotherapy** (*'Riv. di Clin. Pediat.,'* 1916, XIV, *p.* 70).—**A. Melchiorri** describes four cases, in which before injecting the serum he ascertained the amount of antibodies in the blood serum in order to throw light on the question whether, since the paralysis is a toxic polyneuritis, the use of serum would still further damage the nervous system already poisoned by the toxin. An intra-dermo reaction was practised with diphtheritic toxin diluted to 1 in 1000, with negative result. This indicated that in the blood serum of these patients antibodies were present in sufficient quantities to neutralise the effect of the toxin. Meanwhile, in all four the use of antidiphtheritic serum in massive doses repeatedly given had negative or harmful results. The blood serum of these patients contained a large quantity of antibodies, from which fact it may be concluded that none of the tissues contained toxin in the least degree fixed in the cells, and even if any existed, it would be neutralised by the circulating antitoxins which, on the contrary, remained unutilised. In face of these facts, the author asks whether the serum can still be considered a specific in post-diphtheritic paralysis. In one of the patients the author used Sclavo's bivalent serum without appreciable result, which shows that, whether the toxin be exo- or endo-toxin, specific serotherapy, even practised with bivalent serum, is not efficacious in paralysis. In the majority of cases nature provides the means of repairing the damage caused to the nervous system by the intoxication. It must, however, be recognised that serotherapy is an efficient preventive of post-diphtheritic paralysis if used in massive doses in the earliest stages of the disease.

VINCENT DICKINSON.

**The treatment of diphtheria carriers** (*'Journ. de Méd. de Paris,'* 1916, xxxv, *p.* 133).—**Lahr** and **Canat** believe in lavage of the throat with Labarraque's solution, and introduce morning and evening 10 per cent. ointment of resorcin into the nasal fossæ and swab the throat with 1 in 30 iodised glycerine. The bacilli usually disappear in fifteen to forty days. Other cases have been treated by pulverised antimicrobic serum insufflated four times daily into the nostrils. Under this treatment the bacilli disappear usually in twenty-four days. A comparison shows the greater value of the antimicrobic remedy over the purely antiseptic method.

J. Porter Parkinson.

**Treatment of scarlet fever by salicylates** (*'Journ. de Méd. de Paris,'* 1916, xxxv, *p.* 133).—**Ramond** and **Schultz** consider that scarlet fever has many analogies to acute rheumatism, and urge the treatment by salicylates from the beginning of the disease till the temperature has become normal, and again from the fifteenth to the twentieth day, even if there are no new phenomena, as it is then that complications are apt to appear, even in mild cases. At the commencement a medium dose is 6 grm. a day, on the fifteenth day a similar dose may be given, diminishing a gramme a day till the twentieth day. They consider that the fever falls sooner, and the complications are lessened by this treatment, especially the early nephritis, in later nephritis the dose of salicylate should not exceed 2 grm. daily as it may exceptionally be poorly excreted, and then may become dangerous. J. Porter Parkinson.

**The treatment of scarlet fever with fresh blood from convalescent patients** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 112) —**A. Zingher** utilised this treatment in fourteen cases of malignant scarlet fever with gratifying results. The blood is injected intra-muscularly. The blood obtained from the donor may either be injected directly, or it may be previously citrated by adding an ounce of blood to 1 c.c. of a 10 per cent. solution of sodium citrate, making the final dilution of the citrate 0·33 per cent. The following muscles of the patient are chosen and a syringe full of blood is injected into each place: gluteal regions, the outer regions of the thighs, the calves, and the triceps muscles. Four ounces of blood can easily be injected into a young child, and eight ounces into an older child or an adult. The absorption of the blood-mass from the muscles takes place rapidly, and, as a rule, without any further local irritation. At the end of twenty-four hours the muscles will be found to have regained their former size and consistence. The effect of convalescent blood or serum in suitable cases of scarlet fever may be summarised with regard to the following symptoms: 1. Temperature—the decline begins within two to four hours after the injection and reaches its lowest point in nine to fourteen hours. Occasionally we see a slight elevation in temperature immediately after the injection; but this is only of a transitory nature. If secondary septic symptoms are present, the temperature will rise again and often persist for a few days. 2. Pulse becomes stronger, steadier, and slower, as compared with the usual rapid soft pulse of toxic scarlet fever. 3. Cardiac symptoms and cyanosis improve. 4. Respiration becomes more normal. 5. General condition improves perceptibly; a normal mental condition replaces the delirium and apathy. Subjective symptoms disappear. 6. Rash fades rapidly. 7. No influence, however, is directly apparent upon the secondary septic complications, like glands, joints, ear infections, and exudate in the throat. The author believes that

if any benefit is to be derived from convalescent blood, it must be brought into play early, before the patient is overcome with the toxæmia.

J. Allan.

**Treatment of whooping cough** (*'Journ. de Méd. de Paris,'* 1916, xxxv, *p.* 135).—**Satre** considers bromoform one of the most useful drugs as it loosens the cough and stops the vomiting. Terpine in doses of twenty-five to seventy-five centigrammes is very satisfactory. Sulphate of quinine is generally given in too small doses. Satre gives daily as many times twenty centigrammes as the child is years old, diminishing at once when an effect has been produced. J. Porter Parkinson.

**Treatment of pertussis** (*'Amer. Journ. Obst.,'* 1916, lxxiii, *p.* 551).—**I. L. Polozker** treated 100 cases all of whom were children aged from under 1 year to 12 years, except a woman aged 36 years. All but the woman who refused it received pertussis vaccine, an injection being given every fourth day. Early in the disease a mixed vaccine and later the Bordet bacilli alone were used. The vaccine was also used as a prophylactic in healthy children, but all contracted the disease. During the day the children were kept out of doors and at night in the sleeping room inhalations of some volatile oil, such as oil of tar, eucalyptus or creasote was given. According to the medical treatment the patients were divided into ten groups, the first received fluoriform water, the second belladonna, the third heroin and sodium bromide, the fourth adrenalin solution, the fifth antipyrin and opium, the sixth chloretone, the seventh pertussin and diatussin, the eighth bromoform, the ninth the vaso-cresoline lamp, and chloral in the spasmodic stage, the tenth quinine or euquinine. Whatever the medicament used, the disease ran its usual course. Polozker insists on the importance of early diagnosis by blood examination and the complement deviation test and the necessity of isolation. J. D. Rolleston.

**The therapeutic value of pertussis vaccine in whooping-cough** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 1451).—**A. I. von Sholly, J. Blum,** and **L. Smith** give a guarded report as to the value of a specific vaccine in whooping-cough, and consider that more observations with control for comparison must be made before the curative and protective value of a specific pertussis vaccine can be proved. T. R. Whipham.

**Pertussis vaccine** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 1461).—**P. Luttinger** states that the results obtained would warrant the routine administration of pertussis vaccine for both curative and prophylactic purposes. The best time to institute the vaccine treatment, except as a prophylactic, is the first and second week of the paroxysmal stage. When the proper vaccine is given and in the method described the disease is materially reduced in duration and severity. The presence of subconjunctival hæmorrhages in prophylactic cases which were protected by the vaccine seems to point to its specific immunising action against the paroxysms and to the fallacy of the hitherto accepted theory that these hæmorrhages are due to the violence of the cough. T. R. Whipham.

**Vaccine therapy in whooping-cough** (*'La Pediatria,'* 1917, xxv, *p.* 358).—**G. Caronia** used the following method in 155 cases. Plate cultures of Bordet-Gengou of 48 hours' development are emulsified in dis-

tilled water with 0·5 per cent. phenol and left for 3 days at the ordinary temperature. Then 0·85 per cent. sodium chloride is added and the dosage graduated to contain 2,000,000,000 germs per c.c. The vaccine thus prepared is injected subcutaneously or intramuscularly in daily doses of 1 c.c., or alternate days, until cure or mitigation of symptoms. For prophylaxis 2–3 injections are practised at intervals of 48 hours. The benefit was evident after the first injection, and cure usually resulted after 3–5. Some cases required 8–10. Of the 155 cases 61 per cent. were cured, 32 per cent. improved, and 6 per cent. remained stationary.

VINCENT DICKINSON.

**Clinical observations on the curative effect of a new anti-typhoid vaccine** (*'La Pediatria,'* 1916, XXIV, *p.* 6).—**G. di Cristina** states that four methods have been hitherto adopted in the preparation of anti-typhoid vaccine: (1) That prepared with attenuated living bacteria—*e. g.* Castellani's and Besredka, No. 1; (2) that prepared by cultures of bacilli rendered inactive by heat—*e. g.* Wright-Leishman, Pfeiffer and Kolle, Bussel, Besredka No. 2, Loeffler, and Vincent No. 1; (3) that obtained from the products of autolysis of inactive bacilli—*e. g.* Wassermann, Sclavo; (4) that prepared by extraction from living bacilli—*e. g.* Basseuge and Mayer, Vincent No. 2. The author has experimented with a vaccine differing in preparation from any of these. The technique is as follows: The bacteria are subjected to lysis during the initial phase of their development, and a product is obtained which contains in a large degree the derivatives of bacterial proteolysis. The advantage is a vaccine easily dosable, of constant type, which facilitates the fixing of efficacious doses for each case. It is free from any toxic action, and, when inoculated, does not cause any permanent disturbance such as to render it dangerous. Injected intramuscularly or, preferably, intravenous, it is effective in a few hours or days. After intramuscular injection, in a few hours there is a rise of temperature of 1–2°, which then falls; there may also be a rigor. The site of injection becomes red and painful, but only for a few days. After intravenous injection, a kind of anaphylactic shock occurs similar to that caused by injecting heterogenous albumin into sensitised animals. Half an hour after injection there is a rigor and rapid rise of temperature. This lasts 2–6 hours, and is followed by a rapid decline to 35·5° C. During the rigor there may be a slight degree of cyanosis, dyspnœa, and lowering of blood-pressure. The pulse becomes small and rapid. This condition may last some hours, and gradually disappears. Twenty-one cases are described in detail with temperature charts, and may be divided into four groups: (1) Initial cases, slight or grave, as shown by specific agglutinin reaction; (2) those well developed; (3) those in period of defervescence; (4) those with complications. In the first group rapid defervescence occurred with remission of all the symptoms, or else a much modified thermic curve with ample remissions, or an intermittent type lasting a short time with general amelioration. The second group responded equally and in a marked degree. The cases in Group 3 were characterised by a greater sensibility towards the vaccine, and formed the larger contingent of defervescence by crisis. Those in Group 4 were more resistant to the action of the vaccine, but always presented some improvement. There were no fatal cases. VINCENT DICKINSON.

**New methods of antityphoid vaccine therapy** (*'La Pediatria,'* 1917, XXV, *p.* 1).—**G. Caronia** has been experimenting for more than a year in

the treatment of cases of typhoid and paratyphoid by a vaccine prepared on Di Cristina's method, which has the advantages of not containing any extraneous albumin such as meat-juice or rabbit's serum, and of containing a larger amount of the products of bacterial lysis. Out of 46 cases 7 were in the first period, 14 in the second, 11 in the third, 10 had complications, and 4 were mixed forms. In cases of the first group success was invariable and often rapid, especially in those treated by the intravenous method. In some, defervescence occurred by crisis after one or two injections; in others, by lysis after several injections. In some cases after a rapid fall of temperature, a long period of subfebrile intermittence took place, without any general disturbance except a certain degree of asthenia. In cases of the second group the influence of the vaccine was equally constant and more or less rapid, but the fall of temperature was more gradual, and a series of marked remittences or intermittences was common, while generally there was greater resistance of the fever to the vaccine. In the third group vaccine therapy in uncomplicated cases gave the most brilliant results; generally there was defervescence by crisis after one, or at most two, injections, whether intravenous or muscular. In the fourth group success was less apparent, but the good effect of the vaccine was seen on the general condition, while the complications ran a more favourable course. Intravenous injections gave rise to no unfavourable symptoms, but had no advantage over the intramuscular except greater rapidity of action. The efficacy of the vaccine did not lie in its mode of introduction but in the method of preparation.

VINCENT DICKINSON.

**New methods of vaccine therapy in Malta fever** ('*La Pediatria*,' 1917, xxv, *p.* 199).—**G. Caronia** prepares two kinds of vaccine as follows: (1) Various strains of *M. melitensis* are developed at a temperature of 37° C. for 2–3 days on glycerinated agar. The cultures are placed in normal saline, and fresh serum from patients or convalescents containing an appreciable quantity of agglutinins and amboceptors is then added. This mixture is kept at 37° C. for 36 hours, and then a further addition of serum is made and kept for another 36 hours at 37° C., after which ½ per cent. carbolic acid is added and centrifugalised gently to separate the undestroyed organisms. After keeping for 1 hour at 55° C. for three consecutive days it is put up in ampoules. (2) The strains are inoculated on meat-juice and developed for 2–3 days at 37° C., and 5-10 per cent. of serum as before added and then left for 72 hours at 37° C., adding after 36 hours another quantity of serum. After the 72 hours phenol is added as in the first method. Both these vaccines possessed the same curative property, and whether injected intravenously or subcutaneously were equally efficacious. There was always a febrile reaction, and while in some cases the temperature fell rapidly after one or two injections, in others it was only lessened, but always ended in falling rapidly by persistent use of the vaccine.

VINCENT DICKINSON.

**Antimeningococcal serumtherapy in infants** ('*La Pediatria*,' 1915, xxiii, *p.* 753).—**R. Jemma** strongly advocates intraspinal serumtherapy as the most reliable treatment of meningococcal meningitis in infants, affirming that the mortality has thereby been reduced from 50 or 80 per cent. in various epidemics to 10·6 per cent. Unsuccessful results are due either to insufficient quantity of serum used, especially in the early injections, or to the fact that the serum had lost, or deteriorated in, its antitoxic power, or

because instead of the meningococcus the morbid agent of the meningitis was a parameningococcus, which is of rare occurrence, and on which too much importance must not be placed from a practical point of view. The author draws attention to the value of warm baths as a useful addition to the treatment, of a temperature from 39°–40° C., repeated two or three times in the twenty-four hours. They have the effect of allaying pain and alleviating the contractures. Ice-bags ease the headache, but should not be used if the child becomes more restless from them. Urotropine is probably useful in doses of 1–3 grm. daily, and certainly does no harm.

VINCENT DICKINSON.

**Serum therapy in epidemic cerebro-spinal meningitis** (*'La Pediatria,'* 1917, xxv, *p.* 321).—**A. Longo** draws the following conclusions from the epidemic in Catania in 1915: During the epidemic, which consisted mainly of mild cases, serum therapy was very efficacious, for in the municipal hospital where it was largely adopted the mortality was 33·7 per cent., whereas in the town, where the majority of cases were not thus treated, it was 62·2 per cent. Moreover, in 19 cases thoroughly treated there were no deaths or complications, while in 3 cases insufficiently treated (one or two injections at most) and in 12 untreated only 2 complete cures resulted, 7 died, and 6 developed serious complications of the nervous system—*i. e.* deafness and dementia, general convulsions, hydrocephalus and blindness. Among the factors which contribute to the inefficacy of serum therapy in some cases great importance is attached to the eventual existence of adhesions more or less numerous or extensive among the folds of the lepto-meninges which may frustrate the serotherapeutic action by cutting off tracts of the meninges. The existence of such adhesions may perhaps also explain the frequence of relapses. Nephritis is no contra-indication to the use of serum. The author met with severe cases of serum disease, and considers that the problem of its prevention is not yet solved. VINCENT DICKINSON.

**Congestion in the treatment of cases of epidemic cerebro-spinal meningitis** (*'Lancet,'* 1916, i, *p.* 1075).—**D. Forbes** and **E. Cohen** point out that the treatment advocated is simple and does not interfere with concurrent treatment. Congestion of the cerebral vessels is brought about by raising the foot of the bed not simply on the usual ward blocks, but on stools or lockers, so that the bed and the patient's body, no pillow being allowed, make an angle of from 14° to 23° with the floor. Male infant, aged 7 months. Puncture alone was tried. The spinal fluid contained large numbers of organisms, both intra- and extra-cellular. As a last resort on the morning of the sixteenth day of illness, 2 c.c. of the serum of a convalescent patient were injected intrathecally. The effect was astonishing, as the infant, who had required nasal feeding, resumed taking the bottle in the afternoon and seemed much better. The temperature gradually fell and was normal on the evening of the eighteenth day. The fluid at that time was hazy and showed few diplococci as compared with the large number previously present. Unfortunately the child became worse, his colour again became bad on the nineteenth day, and he vomited. He became progressively worse until the twenty-second day of illness, when a further 4 c.c. of the serum of the same convalescent was given and the cot was left raised at an angle of 20°. On the twenty-third and twenty-fourth days there was vomiting, but on the twenty-sixth day he seemed better and on the twenty-seventh day had a normal temperature. The child remaining well the cot was lowered on

the thirty-sixth day at 10 a.m. At 2·30 p.m. there was vomiting. Thereafter the patient became fretful and vomited two or three times a day up to the fortieth day, when he was punctured and showed a clear fluid containing a few lymphocytes. The cot was again raised to an angle of 20° and he almost at once seemed to be better and comfortable. There was no further vomiting. The fluid being normal, the bed was lowered to blocks on the forty-seventh day and finally lowered altogether on the forty-eighth day. The recovery was uninterrupted. Notes on four cases in young adult males are also given. J. Allan.

**The treatment of anterior poliomyelitis** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 386).—**C. Wallace** maintains that every effort should be exerted to prevent the disease by strict quarantine. Many hard hit cases can be saved from multiple paralyses by prolonged rest, competent medical treatment and careful nursing. Vicious deformities may be avoided by early and thorough orthopædic care. Operations give most salutary results when the cases are carefuly selected and the proper one performed. J. Allan.

**Treatment of acute poliomyelitis** (*'New York Med. Journ.,'* 1916, civ, *p.* 337).—**S. J. Meltzer.**—Hexamethylenamine does not cut short the acute stage and does not cause a more satisfactory or rapid recovery. Subdural injection of serum from recovered patients has been said to give promising results, but the supply of this serum is very limited. The writer, as the result of some experiments on animals, suggest that the intrathecal injection of adrenalin is likely to be of benefit. Over seventy cases have been treated in this way, and in no case was any untoward result noted, and it was thought that some benefit resulted. The initial dose was 0·5 c.c. of a 1 in 1000 solution, and this was increased to 3 c.c. of the solution after three to six hours. It was tried only in advanced cases where paralysis of the respiratory centre was developing. It should be given immediately the diagnosis is established, first a fairly large quantity of spinal fluid is withdrawn, and then 2 c.c. of the 1 in 1000 solution injected every four to six hours. Oxygen should be given if any respiratory paralysis is present, for twenty or thirty minutes every two or three hours.
J. Porter Parkinson.

**The treatment of infantile paralysis** (*'New York Med. Journ.,'* 1916, civ, *p.* 1042).—**H. W. Frauenthal** considers that the only satisfactory treatment in the early stage is the injection of serum from persons who have already had the disease. To prevent contraction deformities he objects to the use of plaster of Paris as producing atrophy from the confinement of the limb. He prefers aluminium splints, which can be removed for the bath, massage, etc. In the stage of pains hot baths or electric light baths relieve the patient. He recommends the use of the high frequency cement along the spine for ten minutes at a time every three hours for three days. He believes in the use of electricity at once when the paralysis appears, instead of waiting for some weeks, as is the general rule. He applies the sponge electrodes at the origin and insertion of the involved muscles. The strength of the currents should be the weakest that can produce contraction. Massage should be begun the moment the acute symptoms have disappeared. Warm baths produce an effect on the trophic centres and improve the temperature and growth of the limb. Muscle education, active and passive exercises before a mirror, have a great effect, and the writer believes that

the motor conduction from the brain to the periphery may be carried on by other motor tracts through a new circuit passing around the damaged area in the cord. J. Porter Parkinson

**The electrical treatment of infantile paralysis** ('*New York Med. Journ.*,' 1916, civ, *p.* 635).—**H. C. Frauenthal.**—The positive pole should be used on the paralysed muscles, the negative pole being placed centrally. The current should be interrupted seventy-two times a minute and the treatment should not exceed five minutes daily, using not over 10 milliampères of current. The child should try and contract the muscle while the treatment is carried on. Before the electrical treatment, the limb should be thoroughly warmed and massaged, and afterwards voluntary exercises should be given. The writer attributes a much greater value to electrical treatment than to massage, in the proportion of 55 to 10, while he allows 35 per cent. to physical culture. J. Porter Parkinson.

**Specific treatment of infantile paralysis** ('*Journ. Amer. Med. Assoc.*,' 1916, lxvii, *p.* 426).—**A. Sophian** recommends lumbar puncture, repeated if necessary, for the relief of hydrocephalus, which, he states, is, especially in cerebral cases, not infrequently pronounced. During the acute or preparalytic stage of the disease intrathecal injections of normal horse, or preferably, human serum, should be given with a view to producing a hyperleucocytosis in the cerebro-spinal fluid, and thus preventing paralysis or aborting the disease. The author has also used immune serum from convalescent cases, but the results were no better than with normal horse serum. For respiratory paralysis artificial respiration, or the administration of oxygen under pressure, is recommended. Cases are quoted in which the author employed the treatment he advocates, but they are very few in number.
T. R. Whipham.

**Immune human serum in the treatment of acute poliomyelitis** ('*Journ. Amer. Med. Assoc.*,' 1916, lxvii, *p.* 1211).—**C. W. Wells** advocates the injection in cases of poliomyelitis of serum obtained from individuals who have recovered from the disease. Injections up to 50 c.c. may be given intravenously or intramuscularly, or from 10–15 c.c. intrathecally, or a combination of all three may be employed. Following the intravenous or intramuscular injections, from 5–15 c.c. of cerebro-spinal fluid should be withdrawn in order to reduce pressure and favour circulation in the central nervous system. The first intraspinal injection usually results in an increase in the number of leucocytes in the spinal fluid with an increased proportion of polymorphonuclear cells. No immediate effect is noticed upon the leucocyte count of the blood, which gradually drops to normal within a few days. No ill effects of this treatment have been observed, but in all cases after intravenous, and, to a less degree, after intraspinous, injection, a noticeable improvement usually occurs, but, unfortunately, this is in some cases only transient. The earlier the treatment is commenced the better.
T. R. Whipham.

**Infantile paralysis treated with immune serum** ('*New York Med. Journ.*,' 1916, civ, *p.* 1190).—**D. H. Petty** reports eleven cases treated by intradural injections of immune serum. Of these four died, three recovered without permanent paralysis, and the remainder recovered with more or less

permanent paralysis. He believes the injections should be made very early, if possible, in the preparalytic stage, and the dose of serum should not exceed 10 c.c. J. Porter Parkinson.

**Treatment of poliomyelitis with immune serum** (*'New York State Journ. Med.,'* 1917, xvii, *p.* 279).—**E. Taylor** recounts his experiences in nineteen cases, all but one being 17 years of age or under. He reaches the following conclusions: (1) Serum taken from cases of three years' standing appears to influence the course of the disease. (2) Serum can be administered intraspinally by gravity method and intravenously without danger, if well known rules of precaution are observed. (3) Serum should be administered both intraspinally and intravenously. (4) Early diagnosis confirmed by microscopic and chemical examination of cerebro-spinal fluid, followed by administration of 30 c.c. or more of serum gives the best results. (5) The administration of serum after the acute febrile stage is over and definite paralysis has developed is useless. J. Allan.

**Serum treatment of poliomyelitis** (*'Arch. de Méd. des Enf.* 1916, xix, *p.* 1).—**A. Netter** has treated thirty-two cases since 1910 by intraspinous injection of the serum of persons who have previously had an attack of poliomyelitis. In six recovery was rapid and complete, in three almost complete, seven showed very decided improvement, five appreciable improvement, though the action of the serum was open to doubt, and three showed no change. There were eight deaths, seven of which were due to extension to the bulb. The serum of persons who have had infantile paralysis keeps its efficacy more than thirty years, but as far as possible Netter has used the serum of subjects whose paralysis is of less than five years' duration. The serum is collected aseptically and sterilised by tyndallisation. It is taken from healthy persons in whom Wassermann's reaction has been performed. As a rule the injection should be repeated for eight consecutive days. The doses vary from 5–13 c.c. Human serum is better tolerated than horse serum but sometimes causes inflammatory reaction of the meninges. This usually consists only in changes in the cellular composition of the cerebro-spinal fluid, but is sometimes revealed by fever and pain. The symptoms are rarely intense and usually of short duration. J. D. Rolleston.

**Open-air treatment of pneumonia and anæmia in children** (*'Amer. Journ. Med. Sci.,'* 1916, cli, *p.* 1).—**R. G. Freeman** alludes to the experiments on children with pneumonia (*vide* British Journal of Children's Diseases, 1912, ix, *p.* 476) by Howland and Hoobler, who found a marked increase in blood-pressure from putting the children out of doors and an equal diminution in the blood pressure when they were returned to the closed wards of the hospital. Subsequent observers, however, have not confirmed these results. Freeman records the results of fresh-air treatment in the Roosevelt Hospital, New York, on a roof partly covered by a shed and enclosed on the north, east, and west sides. The children were kept there day and night in all weathers, being brought into the ward only to be changed, bathed, or dressed. The conditions which benefited most from the treatment were pneumonia, tuberculosis, anæmia, chorea, marasmus, and convalescence from any disease. Of twenty-one cases of uncomplicated lobar pneumonia the average course after admission was three days, and the mortality 4·7 per cent; of thirty-one cases of uncomplicated broncho-pneumonia the average course after

admissionwas seven days, and the mortality 3·3 per cent. A detailed description is given of the good results of open-air treatment in simple anæmia in Jaksch's anæmia, and leukæmia with little or no drug treatment.

J. D. Rolleston.

**Results of open-air treatment of pneumonia in children** (*'Boston Med. and Surg. Journ.,'* 1916, clxxiv, *p.* 753).—**A. R. Cunningham** analyses 1500 cases of lobar pneumonia treated in the Boston Children's Hospital between December 1870 and July 1915. The open-air treatment was begun in the latter part of 1905. The figures show no improvement in the mortality and an increase in the percentage of empyema since the introduction of open-air treatment. Cunningham concludes that the results of open-air treatment as practised in the last ten years have not justified expectations, and that there is reason to believe that they are worse than those of the preceding ten years.

J. D. Rolleston.

**Notes on the treatment of broncho-pneumonia in children** (*'Practitioner,'* 1917, xcviii, *p.* 581).—**J. S. Measham** has treated seventeen cases of this disease in the following way: The chest is enveloped in a light Gamgee jacket and over it a pair of woollen combinations. A fire is kept always burning, the window always open, and the bed placed in a part of the room free from draughts. Frequent sips of cold water are given. No medicines are given by the mouth, but a subcutaneous injection of quinine hydrochloride is given morning and evening. A solution is prepared in which one grain is dissolved in ten minims of water, and the dosage is as follows: For a child under six months ℥v, under a year ℥x, under two years ℥xv, over two years ℥xx. Histories of the seventeen cases are given, two of which died, one from Bright's disease, and the other case was not seen until the seventh day.

F. R. B. Atkinson.

**Interlobar empyema treated by artificial pneumothorax** (*'Journ. Amer. Med. Assoc.,'* 1916, lxvi, *p.* 1019).—**A. E. Greer** reports the case of a boy, aged 5 years, who, after pneumonia, began to cough up an empyema. Physical signs and X rays located the pus between the upper and middle lobes on the right side. Paracentesis was negative, so artificial pneumothorax was induced. Within 24 hours the temperature fell to normal, and a great deal of pus was coughed up. The expectoration gradually decreased, and two further injections of nitrogen were made without inducing further cough. The boy made a good recovery.

T. R. Whipham.

**Hay fever treated with the pollen extract** (*'Journ. Amer. Med. Assoc.,'* 1916, lxvi, *p.* 738).—**Margaret L. Noyes** records two cases of hay fever, one of which was a child, aged 11 years. The family history was negative, but the child, who was anæmic, had had a similar attack the previous season. Nasal examination revealed the anterior ends of the inferior turbinates puffy and covered by a thin, watery discharge, causing complete obstruction. A severe reaction was obtained with both the ragweed and golden-rod pollen skin tests, and a weak solution of the former was given hypodermically according to the technique of Goodale. For two days there was local swelling and tenderness, as well as a swelling of the whole arm from elbow to shoulder. The symptoms disappeared, and there was no return.

T. R. Whipham.

**The treatment of the disturbances of digestion in infancy** (*'New York State Journ. Med.,'* 1916, xvi, *p.* 54).—**J. L. Morse** deals with the treatment of simple indigestion and indigestion with fermentation. The following classification of indigestion is adopted: 1. Indigestion from an excess of food; 2. Indigestion from an excess of an individual food element; (*a*) fat, (*b*) carbohydrate, (*c*) protein, (*d*) salts; 3. Indigestion with fermentation. In simple indigestion the treatment is mainly diatetic, and drugs are of little use. Indigestion with fermentation is much more serious, and the object to be aimed at in its treatment is the destruction, or, at least, the inhibition of the activity of the micro-organisms, which are the cause of the disease. Babies that are seriously ill with indigestion with fermentation are very likely to show one or more rather characteristic symptoms or groups of symptoms. One of these groups of symptoms almost invariably develops toward the end in fatal cases. These symptoms are: (*a*) excessive vomiting; (*b*) hyperpyrexia; (*c*) symptoms of irritation of the central nervous system; (*d*) prostration and collapse. It is probable that these symptoms are chiefly manifestations of toxæmia. It is presumable that the loss of water through the bowels may also play a part in their production. If, when any of these symptoms appear, there is any doubt as to whether the bowels have been thoroughly emptied, it is advisable to repeat the initial catharsis. It is also advisable, if the condition of the nutrition warrants it, to with hold food for about twelve hours. Caution must be exercised, however, about withdrawing food if the disturbance is due to proteolytic organisms. If there is excessive vomiting, food should be withdrawn entirely and the stomach washed out with a solution of sodium bicarbonate. The hyperpyrexia is best treated by the use of cold externally. It is seldom advisable to give coal tar products to infants to reduce the temperature. Bromide of sodium, in doses of from five to ten grains by the mouth, may be given for restlessness and excitement. It may be combined with one or two grains of chloral hydrate. It is useless to give drugs by enema in this condition, as they are almost never retained. Small doses of morphine subcutaneously may be necessary. If the fontanelle is full a lumbar puncture will often give relief. Prostration and collapse are to be treated as when they occur in other conditions. It must be remembered, however, that all forms of treatment weaken and exhaust the baby. The baby should be disturbed as little as possible. Alcohol is contra-indicated when these conditions are associated with vaso-motor paralysis and lowering of the blood-pressure. Adrenalin is of some value, but must be given subcutaneously or intravenously. Strychnia is in general the most useful of the stimulants, while caffein and camphor are the best quick stimulants.

J. Allan.

**Results of treatment in Hodgkin's disease** (*'Journ. Amer. Med. Assoc.,'* 1917, lxviii, *p.* 747).—**J. L. Yates** and **C. H. Bunting** give the results of their clinical experience in treating 63 cases of Hodgkin's disease over a period of eight years. The principles of their treatment have already been described (*vide* British Journal of Children's Diseases, 1916, xiii, p. 184). They estimate that in 20 per cent. of all cases recovery is possible. In acute cases the estimated possibility of recovery is less than 5 per cent., in incipient cases from 80 to 90 per cent., in early cases from 60 to 70 per cent., in moderately advanced cases from 30 to 40 per cent., and in advanced cases from 5 to 10 per cent. Very late cases appear to be fatal.

T. R. Whipham.

**The citrate method of blood transfusion in children** (*'Amer. Journ. Med. Sci.,'* 1915, CL, *p.* 886).—**R. Lewisohn** finds 0·2 per cent. solution of sodium citrate suffices to prevent coagulation of the blood, while sodium citrate, used in the ratio of 1 per cent., would prove fatal in large transfusions of blood (1000 c.c.) The technique is the same as in adults (*'Journ. Amer. Med. Assoc.,'* 1915, LXIV, *p.* 425). Six cases are described.

F. R. B. ATKINSON.

**The treatment of nephritis by adrenalin** (*'Med. Press.,'* 1917, I, *p.* 258).—**I. Harris** reports a case in a school boy, aged 15 years, of undeveloped physique, and extremely pale appearance. He noticed swelling of the face and neck six months before admission to hospital, after an attack of eczema. Since then he had frequently suffered from ascites and swelling of lower limbs. When admitted he was suffering from general œdema. The heart dulness was, however, practically normal, and there has been no murmur of any kind; no accentuation of heart sounds; fundus oculi of both sides normal; urine, hyaline, fatty casts, leucocytes, albumin; blood-pressure 115 Hg. After being thirty-six days under treatment, adrenalin (10 minims of a 1 in 1000 solution four times a day, increased later to 15 minims by the mouth) was prescribed. The œdema disappeared and the albumin diminished considerably under its influence, and the patient was able to leave the hospital in a fair condition of health.

J. ALLAN.

**Heliotherapy in children** (*'Riv. di Clin. Pediat.,'* 1916, XIV, *p.* 561).—**A. Filia** reports on the value of this method in Pott's disease, tuberculous peritonitis and secondary anæmias, and gives details of nine illustrative cases. The general results obtained show that this method is of application in any locality, whether on the hills or seaside, or even at home. This extension of its application and the good results obtained prove that it should be associated always with the medicinal and dietetic cure of children, whether they are suffering from osseous, peritoneal, incipient pulmonary, or glandular tuberculosis, or from acute or chronic intestinal disturbance, or simple, physical debility, or secondary anæmia, or mental overstrain.

VINCENT DICKINSON.

**Bier's venous stasis in tuberculous meningitis and hydrocephalus** (*Riv. di Clin. Pediat.*, 1916, XI, *p.* 337).—**G. Squarti** treated eight cases of typical tuberculous meningitis by Bier's method, without, however, preventing a fatal issue. But during the treatment he noticed that the cerebro-spinal fluid, which usually after removal by lumbar puncture rapidly re-collects, did not accumulate again under the influence of the venous stasis, so that lumbar puncture practised during and after a certain number of applications of the elastic band only drew off a very scanty amount of fluid. Convinced that this phenomenon had some connection, not with diminished secretion but with increased absorption of the cerebro-spinal fluid, the author tried the same method of treatment in hydrocephalic forms, and specially those which ran a more chronic course where there was evidently some impediment to re-absorption. Three marked cases are reported which had had prolonged treatment by various methods, including repeated lumbar and ventricular punctures, and which were then subjected to Bier's method. The procedure adopted was effected by the application of ordinary elastic tubing, 3–5 mm. in thickness, this being more suitable than an elastic band in view of the small size of the neck in young infants,

often still further reduced by a position of opisthotonos. The application was invariably made in the dorsal decubitus and in the intervals between feeding, care being taken to apply the tube at the base of the neck to avoid pressure on the trachea. The tube is at first held with the requisite degree of tension which is gradually increased so as to produce a certain amount of cyanosis; after the tube is properly adjusted and there is no untoward incident it is fixed with an ordinary clip, preferably behind the sterno-mastoid. It is advisable that the tension of the tube should be made slowly so that first turgescence of the superficial veins occurs, then slight cyanosis of the lips and lobes of the ears and finally of the entire face, which is obtained in about 20 or 25 minutes. The duration of the applications was half an hour the first few days, afterwards an hour, and it was often repeated in the same day. Otherwise, the length of application and intensity of cyanosis had to be regulated according to the tolerance shown in various subjects. Usually the treatment was well borne; at first the child cried and became restless, but after the first few days it was soon quieted, and often fell asleep. The application could not be continued beyond one hour because the children cried, became breathless, and sometimes vomited. This occasionally happened in the first applications if they were not short and slight. The pulse was not modified as a rule. The results obtained were most satisfactory in the author's first two cases, where in about a month's time he obtained a marked diminution of the hydrocephalic effusion, with gradually lessening and final disappearance of all the nervous symptoms. In the third case, the most serious of all, treatment could not be continued for as long as the gravity of it required; nevertheless, considerable improvement ensued. These results are to be explained by our knowledge of the nature of the hydrocephalic lesions and the action of the stasis itself. The altered circulation, especially in the choroid plexuses, hinders absorption and produces accumulation of fluid in the cerebral ventricles, while, on the other hand, the venous stasis increases the capillary area and venous trunks, and thus improves the circulation and promotes more copious absorption.

VINCENT DICKINSON.

**Further experiences in the treatment of hydrocephalus by cisterna-sinus drainage** (*'New York State Journ. Med.,'* 1916, XVI, *p.* 174).—**I. S. Haynes** thinks that hydrocephalus in the majority of cases is caused by an obstruction to the flow of the fluid from the lateral ventricles through the central channels of the brain into the great subarachnoid space-cisterna magna, and in treatment he advocates cisterna-sinus drainage which seeks to direct the fluid from the hydrocephalic cavity into the blood-stream through one of the cranial sinuses. The technique of the operation is fully described and illustrated and notes on twelve cases are appended.

J. ALLAN.

**The present-day therapeutics of spasmophilia** (*'La Pediatria,'* 1916, XXIV, *p.* 282).—**O. Cozzolino**, of the Children's Clinic at Parma, contributes an interesting review on this subject. Parathyroid opotherapy is discussed, and attention drawn to the probable divergence in therapeutic value of preparations from too old or too young animals as not containing sufficient quantities of the active principle. He considers that opotherapy in spasmophilia may, in the future, tend towards a pluriglandular, or at least a parathyro-thymic, opotherapy. He lays stress on the prophylactic value of proper feeding, and the importance of care of slight ailments which may

favour the development of convulsive manifestations. Cold douches and inhalation of oxygen are considered more or less efficacious during the attacks, as are also enemata of chloral and bromide and the administration of these drugs by mouth. When the attacks are frequently repeated, he advises injections of 1–2 mgm. of morphia. The effects of water and starch diet are analysed, also the use of phosphorised oil and lime salts. The writer himself lays most importance on the observance of strict hygienic conditions and the administration of phosphorised cod-liver oil. When convulsions occur, the stomach and intestines should be emptied and sedatives given, narcotics being only necessary in serious or prolonged cases. The infant, moreover, should be removed from neuropathic family surroundings, and placed under a cure at the seaside or at some bromo-iodide spa.

VINCENT DICKINSON.

**Case of lacerated wound of the thigh treated by eusol** (*'Edin. Med. Journ.,'* 1916, 1, *p.* 128).—**A Miles.**—A boy, aged 6 years, was knocked down by a car and sustained an extensive lacerated wound on the front and inner aspect of the right thigh. The quadriceps extensor, sartorius, and adductor muscles were torn across and their ends retracted, exposing the femoral vessels, which, however, were intact. The superficial tissues of the whole thigh were contused and the limb was considerably swollen. The edges of the torn skin on the outer edge of the wound were undermined for a distance of from two to three inches, and near the lower end was a smaller laceration through the undermined integument. The whole length of the inner edge was everted, exposing the subcutaneous fat on its deep aspect. There was in addition a lacerated wound in the perineum. Eusol was used to cleanse the parts and the wounds were dressed with gauze soaked in eusol. None of the bruised tissue was clipped away. The ends of the torn muscles were identified and sutured accurately with catgut. The result was most satisfactory. Granulations formed with more than usual rapidity, and the wound healed with a sound and pliable cicatrix. The functional result, in view of the extensive laceration of muscles was also good, and the boy can walk without a limp and has perfect use of all the muscles that were sutured.

J. ALLAN.

**The scope of preventive work in connection with the medical treatment of infants and young children** (*'Edin. Med. Journ.,'* 1917, 1, *p.* 329).—**J. C. Johnston** shows that an efficient scheme of prevention must be directed at the definite diseases and conditions which combine to destroy life in the very young—syphilis, tuberculosis, and bad feeding—and whatever contributes to these three. Any adequate scheme of prevention should direct its aim: (1) To attack inanition, malnutrition, and marasmus at their source—that is to say, to investigate nutrition from the standpoint of the infant's earliest needs both in intra-uterine and extra-uterine life; (2) to seek out the sources of gastro-enteritis and diarrhœa; (3) to discover some means of protecting the infant and young child from tuberculous infection; and (4) to fortify the child against other and repeated infections of the respiratory tract as it begins to walk and onward. Emphasis is laid on the value of a dietetic clinic which should be the centre of preventive industry, linked with maternity worked on the one side, with dispensary and hospital treatment on the other. The dietetic clinic should be aided and abetted by a feeding ward equipped with milk laboratories, and it should also be in touch with generous provision for convalescence from acute disorders or chronic conditions.

J. ALLAN.

**The thermal springs and baths in France for the treatment of children** (*'Journ. de Méd. de Paris,'* 1916, xxxv, *p.* 69).—**H. Rouèche.**—These baths are quite as useful for the treatment of children as they are for adults. The following are the indications: (1) Pulmonary affections. Sulphur waters are specially indicated as baths, inhalations, and drinks. Chloride waters are useful in chronic catarrh. (2) Local tuberculosis, scrofula, lymphatism. Sodium chloride waters are specially indicated. (3) Digestive disorders. Bicarbonate, sodium chloride, and calcium sulphate waters are useful. Atonic enteritis is benefited by the mixed bicarbonates and chlorides of magnesium. (4) Albuminuria derives benefit from bicarbonate and chloride waters. (5) Nervous diseases. Hot springs of a slight and mixed mineralisation or radio-active waters are useful. (6) Skin diseases are benefited by arsenical or sulphurous waters cold or hot. (7) Rheumatic affections are treated by hot waters; articular lesions by hot chloride waters or mud baths. (8) Heart diseases. Strong carbonic acid waters, hot springs, and radio-active waters give good results. The various hydropathic stations are: *Alet* (Aude). Bicarbonate and calcium waters hot or cold. Indications: Enteritis and gastro-enteritis, convalescence from infectious diseases. *Allevard* (Isère). Cold baths, calcium sulphate. Indications: After whooping-cough, measles, lymphatic gland enlargements, pleurisy, bronchitis, tracheitis, enlargement of tonsils, stomatitis, otitis, etc. *Amélie les Bains* (Pyrénées orientales). Sulphate of soda baths. Indications: Convalescence, anæmia, laryngeal affections. *Argelés-Gazost* (Hautes Pyrénées). Mixed sulphur waters. Indications: Respiratory diseases. *Aix-les-Thermes* (Ariège). Hot sulphur waters, nitrates, and silicates. Indications: Rheumatism, seborrhœa, nose, throat, and ear diseases. *Bagnoles-de-l'Orne* (Orne). Hot and cold iron waters. Indications: Chorea, myxœdema, rheumatism, etc. *Bagnoles-les-Bains* (Lozère). Calcium sulphate waters. Indications: Heart affections, enlarged glands, etc. *Barèges* (Hautes Pyrénées). Sodium and sulphate waters. Indications: Lymphatic enlargements, bone diseases, infantile paralysis. *Biarritz* (Basses Pyrénées). Chloride of sodium and bromo-iodide waters. Indications: Lymphatic enlargements, tubercular bone disease, rickets, infantile paralysis, etc. *Bourbon l'Archambault* (Allier). Sodium chloride and iodide and carbonate. Indications as the last. *Bourbon Laucy* (Saône et Loire). Sodium chloride, iodide, and bicarbonate; iodide waters and arsenical waters. Indications: Heart diseases except pericarditis. *Bourbonne les Bains* (Haute Marne). Chloride of sodium. Indications: Lymphatism, scrofula, rickets, and bony lesions. *La Bourboule* (Puy de dôme). Hot, arsenical, chloride, and bicarbonate waters strongly radio-active. Indications: Neurasthenia, enlarged glands, suspected tubercle, asthma, and some skin diseases. *Bursang* (Vosges). Arsenical, iron, and bicarbonate waters. Indications: Chlorosis, debility, lymphatism. *Cambo* (Basses Pyrénées). Sulphur and iron waters. Indications: Pharyngitis, bronchitis, anæmia, etc. *Eaux Chaudes* (Basses Pyrénées). Hot, sulphurated waters, with soda, lime, and silica. Indications: Laryngeal affections and debilitated children. *Evian* (Haute Savoie). Bicarbonates. Indications: Arthritis, dyspepsia, chronic diarrhœa. *Forges les Eaux* (Seine Inférieure). Cold, ferruginous waters. Indications: Anæmia and lymphatism. *Luchon* (Haute Garonne). Hot, sulphated soda waters. Indications: Chronic respiratory affections. *Mont Dore* (Puy de Dôme). Hot, bicarbonate, ferruginous, and arsenical waters. Indications: Respiratory and nasal diseases, asthma, pulmonary tuberculosis, etc. *Plombières-les-Bains* (Vosges). Hot, radio-active, arsenical, and soda waters. Indications:

Enterocolitis, constipation, chorea, and affections of the respiratory passages. *Royat* (Puy de Dôme). Alkaline, bicarbonate, arsenical, ferruginous waters. Indications: Arthritis, anæmia, cardiopathy, etc. *Saint Galmier* (Loire). Bicarbonate of lime and soda, gaseous waters, useful in early tuberculosis. *Vichy* (Allier). Strong bicarbonate of soda waters, hot and cold. Indications: Gastroenteritis, arthritis, obesity, etc. *Vittel* (Vosges). Sulphated and carbonated lime, soda, and magnesia. Indications: Urinary troubles, uric acid, etc.; biliary troubles, digestive disorders, migraine, etc. I have only given the chief balneological stations out of a long list, choosing those best known in this country.

J. Porter Parkinson.

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## Correspondence.

*To the Editor of* The British Journal of Children's Diseases.

### WAR EMERGENCY FUND OF THE ROYAL MEDICAL BENEVOLENT FUND.

Sir,—The time has come to make a further appeal for the War Emergency Fund.

This Fund was instituted last year to afford assistance to members of our profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.

Many medical men, when called up, had to leave on very short notice, without time to make adequate provision for the continuance and maintenance of their practices during their absence. As a result they have had to face a severe fall in income even when supplemented by Army pay; while many expenses, such as rent, insurance, taxes, family maintenance, and education, could not be reduced. Although in a year or two after their return it may be hoped those affected will recover their position, still in the interval help is, and will be, necessary, and it is to meet these needs that the War Emergency Fund was established.

To be effective the grants must be made on a liberal scale, and the fund from which they are to be drawn must be a large one. The sum obtained last year was about £4000. This is quite inadequate, as at least £25,000 will be required, if even a small proportion of those requiring assistance is to be helped. From the wealthier members of the medical profession, it is hoped, substantial sums will be received, but everyone should feel it a duty which he owes to his less prosperous colleagues to give the most liberal donation he can afford.

At the same time the appeal is not, and ought not to be, restricted to the medical profession. The public, too, may be rightly called upon to bear its share, and to show, by liberal contributions, its appreciation of the special services so freely rendered by the medical profession to the country.

The War Emergency Fund is a special department of the Royal Medical Benevolent Fund. It is kept separate and distinct from the ordinary operations of the general fund, and is under the management of a committee specially appointed for the purpose.

Communications should be addressed to the Honorary Secretary, War Emergency Fund, 11, Chandos Street, Cavendish Square, W. 1, to whom cheques should be made payable. We are, etc.,

SAMUEL WEST, *President.*
CHARTERS J. SYMONDS, Colonel, A.M.S., *Hon. Treasurer.*
G. NEWTON PITT, Major, R.A.M.C.T., *Hon. Secretary.*

LONDON, W. 1;
*June 8th.*

*Cases of Special Distress caused by the War which the Committee have helped.*

A lieutenant in the R.A.M.C., who had only been in practice a few years, volunteered for service, and was killed in action a few days later. He left a widow, with two children, aged $3\frac{1}{2}$ and 1 year, without means except the War Office pension. The fund voted £25 for her immediate necessities, and the Officers' Families Fund gave further help.

A captain in the Territorials was called out, and had to leave his practice in the hands of a *locum*, who proved a failure. There were seven children, aged 2 to 14 years. Financial difficulties arose, and payment of the school fees became impossible. Between the Fund and Guild, and the Officers' Families Fund, the necessary fees were raised, and sorely needed clothing provided.

A captain in the Territorials, who was called out when the Army mobilised, and had to leave his practice worth £800 at a day's notice, could not pay the fees for his son's education, who was in his last year at school. The Fund, the Guild, and the Professional Classes War Relief Council together raised the necessary money.

A captain in the Territorials was killed in action, and left a widow, and two children, aged 3 and $4\frac{1}{2}$ years. The Fund investigated the case, and referred it to the Officers' Families Fund, who gave her a grant to meet her immediate necessities. The Fund also obtained work for the widow, a trained nurse, who was thus enabled to earn her own living.

A major, R.A.M.C., Territorial, was called out at the beginning of the war and was abroad for over two years. He was invalided to England and put on home service. His practice was completely lost by his absence. There are three children, one in the Navy, one in the Army, and one at school. He had to give up his house, as he was in difficulties with rent, taxes, and education. The Fund gave £50, and further help was obtained from other sources.

A captain in the R.A.M.C.(T.), with a wife and six children, found the income derived from his practice, left in charge of a *locum*, and the balance of his Army pay insufficient to meet his expenses. He obtained assistance from the Civil Liabilities Committee and the Officers' Families Fund, and a grant was made from the War Emergency Fund towards the education of the children.

A practitioner, earning £700 to £800, volunteered for service, leaving his practice in the hands of a neighbour, who was not a success. There were two children, aged 7 and 10 years, and another baby was born shortly after the husband left. The wife contracted pneumonia and nearly died. A resident patient had to leave the house. Rent and other expenses led to a debt of about £80. This the doctor could not meet, and he hurried back from the trenches to save his home from being sold up. The Fund voted £25, the Guild gave £15, the Officers' Families Fund £25, and the Professional

Classes War Relief Council offered further help, with the result that he returned to the Front with his immediate anxieties relieved.

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Sir,—We beg to support the urgent letter of appeal to this Fund which appeared in the last week's medical journals.

This Fund was instituted by the Royal Medical Benevolent Fund last year to afford assistance to members of the profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.

We very strongly commend the claims of this Fund to the generous support of both the profession and the public.—We are, etc.,

Frederick Taylor
(President, Royal College of Physicians)
W. Watson Cheyne
(President, Royal College of Surgeons).
W. H. Norman, Surgeon-General, R.N.
(Director-General of the Medical Department of the Navy).
Alfred H. Keogh
(Director-General, Army Medical Service).
William Osler
(Regius Professor of Medicine, University of Oxford).
T. Clifford Allbutt
(Regius Professor of Physic, University of Cambridge).
John Tweedy
(Past President, Royal Medical Benevolent Fund).

11, Chandos Street,
Cavendish Square, W. 1;
*June 16th.*

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## Reviews.

Three Lectures on the Treatment of Diabetes Mellitus by Alimentary Rest (The Allen Treatment). By O. Leyton, M.D., D.Sc., F.R.C.P., Physician to the London Hospital. Pp. 64. 1 fig. London: Adlard & Son & West Newman, Ltd. 1917. Price 3s.

These lectures, reprinted from the 'Clinical Journal,' are attractively written, and contain in the convenient form of tables the practical details of the diet and treatment. The value of the Allen treatment thus carried out at the London Hospital is shown by the following figures: in 1913, when the old treatment was in vogue, out of 66 cases of diabetes admitted to the hospital, 1 only left the hospital without glycosuria, whereas in 1916 out of 39 cases treated by the new method 29 were discharged sugar-free and upon a diet in the region of 2000 calories. The comment of a patient who when under the old-fashioned diet had steadily lost weight, and when, owing to his medical adviser's decease, came under the Allen *régime* and gained 7 lb. in six weeks, is a graphic, if rather grim, testimonial: "My doctor died; if he hadn't, I should." Dr. Leyton throws out a vigorous caution against any so-called modified Allen treatment which possesses most of the disadvantages and none of the advantages of the original method.

The treatment should either be carried out in its entirety or not attempted, and to associate the name of Allen with a treatment which does not lead to the disappearance of sugar from the urine is to malign Allen. The Allen treatment should not be adopted in cases of diabetes complicated with tuberculosis, and it may be difficult to decide if this additional factor is present; while admitting that the expediency of using a tuberculin test must be left to the individual physician, Dr. Leyton warns the reader that "anyone who lights up quiescent tuberculosis in a diabetic may be guilty of manslaughter." These shrewd, practical, and concise lectures will be of value to those who require guidance in carrying out this modern treatment of diabetes. H. D. R.

War-Shock: The Psycho-Neuroses in War Psychology and Treatment. By M. D. Eder, B.Sc.Lond., M.R.C.S., L.R.C.P.Lond., late Temporary Captain, R.A.M.C., and Medical Officer in Charge of Psycho-Neurological Department, Malta. London: W. Heinemann. 1917. Pp. 154 + vii. Price 5s. net.

What Mr. Eder means by war-shock is a psycho-neurosis produced by stress of external conditions acting on a mind more sensitive than the normal person's. In this book a series of 100 such cases is analysed with the object of giving an insight into the mental processes at work in these affections, and consequently of providing a sound basis for their adequate treatment. The author finds that functional diseases are rare among the wounded, but hysteria and psychasthenia occur as the result of psychical stimulus among men who are free from hereditary or personal psycho-neurotic antecedents but possessive of minds more responsive than the normal. It is thus the psychic, and not the physical trauma, that is the chief factor in the production of war-shock, and this is even more important than predisposition.

In his writing the author shows an adherence to the teaching of Freud, Jung, and others, a school the methods and conclusions of which do not find favour with many persons. Nevertheless it must be admitted that from the evidence here set forth the results obtained in a number of cases of psycho-neurosis caused by the war were highly satisfactory. Hypnotic suggestion is the treatment advocated, the suggestion by preference being directed to the complex as determined from the psychological examination and general psycho-analytical conclusions. By this means over 90 per cent. of the cases were cured, and a further 8·5 per cent. improved. Cure is said to be very rapidly effected, most cases recovering in less than two weeks, and some in a few minutes or hours. The importance of such a rapid restoration to a normal state of mind is evident from the author's statement that the majority of war-shock cases, so cured, can return to the Front in three to six months.

Mr. Eder is an earnest believer in the methods which he advocates, and his treatise will doubtless appeal to those who are interested in this branch of psychology.

The book shows signs of hurry in production. The descriptions of vision on p. 32 are carelessly printed and partly unintelligible; the names of Mackenzie and Graves are repeatedly misspelled; and the numbers of pages to which reference is made are here and there omitted.

We do not quite understand what the author implies by "the vegetative nervous system" nor what he means by the word "aguisia." T. R. W.

Transactions of the American Pediatric Society. Twenty-eighth Session, 1916. Vol. xxviii. Edited by L. E. La Fétra, M.D.

This volume contains thirty-five papers by various authors, and fully maintains the interest of its predecessors. Dr. R. M. Smith writes on the "Pyelitis of Infancy," and maintains that this is always a blood-infection, chiefly from the gastro-intestinal tract. Drs. J. Howland and W. McK. Marriott contribute a paper on the "Calcium Content of the Blood in Rachitis and Tetany." As a result of their investigations they find that "tetany differs from rickets in that there is a marked reduction in the calcium of the circulating blood." Dr. I. A. Abt deals with the "Familial Icterus of Newborn Infants." The Schick test is the subject of articles by Dr. D. M. Cowie and Drs. H. L. K. Shaw and W. E. Youland, and "Meningitis in the Newborn and in Infants under Three Months of Age" that of an interesting paper by Dr. H. Koplik. The final Report of the Commission on "Vaginitis in Children" occupies thirty pages, and the same disease is dealt with by Dr. B. K. Rachford and Dr. A. F. Hess. Reports of some interesting cases are also contributed by other writers. T. R. W.

Some Medical Aspects of Maternity and Child Welfare. Reprinted from the 'Edinburgh Medical Journal,' May–June 1917.

Here we have a symposium upon the medical aspects of maternity and child welfare, comprising papers read at a series of meetings of the Edinburgh Pathological Society, and introducing discussions on the various subjects. In all some seventeen aspects of the question are considered in papers which have a very high value. It is true that it cannot be claimed for any one of the articles that it presents matter which is novel or original, but together they form an admirable *résumé* of the beliefs upon which maternity and infant welfare work is based, of the ideals which inspire it, and of the practical measures which have been, or which should be adopted.

At the present time when the interest of the public is being awakened to the importance of the movement by an active propaganda, the publication of these papers is especially to be welcomed. When we reflect that from a hundred platforms the gospel is preached by enthusiastic missionaries—themselves often converts of a recent date—it is not surprising that misleading statements should at times obtain sanction from authorities and organisations which ought to know better. When there is added the wish to simplify for the understanding of the public a subject essentially complex, it is perhaps only to be expected that the propaganda of the movement should contain many statements of doubtful truth, and some which are demonstrably untrue. For this reason we feel sure that the Council of the Royal College of Physicians of Edinburgh has acted wisely in circulating this series of papers among the members of the medical profession in Edinburgh.

The foreword by Dr. Lorrain Smith sets an example of scrupulous accuracy and careful statement from which the authors of the succeeding papers only very rarely allow their enthusiasm for their subject to carry them: "The families of all classes suffer the illnesses of childhood, but these illnesses generally leave the well-cared-for child unscathed. On the other hand, to the child who is ill-nourished the incident of such simple diseases as measles or whooping cough too often brings more or less permanent damage, if not death itself. The difference between the two types

of cases need not exist." The purpose of the movement for infant welfare could not be better expressed, though Dr. Lorrain Smith in choosing his examples might have descended in the scale of severity of disease still further. Among the faulty children of the poor a simple catarrhal infection such as would cause scarcely a day's inconvenience to the healthy child of good tissue and high resistance, may be productive of a serious or even fatal illness.

The Report of the Special Committee on Maternity and Child Welfare has some fine phrases to enliven it: "The agencies at work should be essentially advisory and helpful rather than minatory and coercive." Dr. Thomson in his article puts it better: "The best and easiest way to win the mothers is to earn their gratitude by being good to the children." The statement found in the Report that ophthalmia neonatorum is a prolific cause of blindness, hardly tallies with the figures given later by Dr. Paterson and Dr. Traquair who report only two cases of the disease notified in Leith during the last year, and only sixty-one cases notified in the whole of Edinburgh in the four years since the establishment of compulsory notification.

Many of the papers lay stress upon the great frequency of tuberculosis, and especially of bovine tuberculosis in Edinburgh. The Report quoted above says that 90 per cent. of tuberculous cervical glands were due to infection by a bacillus of bovine type. A still more remarkable statement is that of Dr. Fraser, who quotes Dr. Turner to the effect that 50 per cent. of cases of suppurative otitis media in children under one year are due to tuberculosis, and that the prognosis in these cases is very bad. The frequency of simple acute otitis media is so great in the first year of life that we find it difficult to credit this statement.

We like least the paper by Mr. J. H. Gibbs upon the "Prevention of Dental Disease." Not a few of his statements seem to contain exaggerations which even a good cause cannot excuse. After examining the nature of the diet commonly taken by children in this country, he expresses himself as follows: "It has already been said at these meetings that the commonest ailment of infants is indigestion. Considering that the doctor has given the mother detailed instructions for producing dyspepsia and ill-health in her child, which may handicap him throughout life, we should marvel, not that indigestion is so rife, but that the child is alive at all." He speaks slightingly of statements by Dr. Woods Hutchinson, and Dr. W. Leslie Mackenzie, who maintain that the need of the child for sugar is so great that to remove it entirely from his dietary would do more harm than good—a statement with which we heartily agree. Mr. Gibbs is of opinion that dental caries "could be almost completely abolished simply by discarding a few recently introduced luxuries in the shape of sweets, and by so arranging our meals that none of them shall end with soft, sticky, sugary foods." He advises that children from fifteen months "should have sufficient salt, vinegar, mint sauce or other sauce or pickles to flavour their meat or gravy," in order to encourage the secretion of a saliva of high alkalinity. There is much that is true in Mr. Gibbs' contentions, but his outlook must seem narrow to those who are familiar with the diseases of infancy and childhood. The texture of the teeth, and indeed of all the epithelial structures, suffers profoundly under the prolonged action of faults of hygiene and repeated infections of the body. Dry, thin hair and irregular faulty teeth alike owe their defects to the feeble nutrition of the whole body.

H. C. C.